Appendix C
Wetland Data Sheets

PROJECT TITLE: Calais LNG | **MP**: N/A (Terminal Site) | **Transect:** B2 | **PLOT**: Wetland

EVALUATOR(S): WSM | **DATE:** July 11, 2008

VEGETATION

Stratum	Species	Dominance Ratio	Percent Dominance	DOM	NWI Status
Herbs/Seedlings	*Glyceria striata* (fowl mannagrass)	20.5/85.5	24%	X	OBL
	Gymnocarpium dryopteris (common oak fern)	10.5/85.5	12%		---
	Arisaema triphyllum (swamp jack-in-the-pulpit)	3/85.5	4%		---
	Galium asprellum (rough bedstraw)	10.5/85.5	12%		---
	Carex leptalea (bristly stalked sedge)	38/85.5	44%	X	OBL
	Trientalis borealis (starflower)	3/85.5	4%		---
Mosses	*Sphagnum sp.* (sphagnum moss)	10.5/48.5	22%	X	OBL
	Hylocomium splendens (feather moss)	38/48.5	78%	X	NI
Shrubs	*Alnus rugosa* (speckled alder)	38/59	64%	X	FACW+
	Thuja occidentalis (northern white cedar)	10.5/59	18%		---
	Abies balsamea (balsam fir)	10.5/59	18%		---
Saplings	*Abies balsamea* (balsam fir)	63/63	100%	X	FAC
Trees	*Thuja occidentalis* (northern white cedar)	745/921	81%	X	FACW
	Abies balsamea (balsam fir)	176/921	19%		---

HYDROPHYTES

3	2	1	0
OBL	FACW	FAC	*OTHER

NON-HYDROPHYTES

0	0	0
FAC-	FACU	UPL

Hydrophytes Subtotal (A): 6

Non-hydrophytes Subtotal (B): 0

Percent Hydrophytes (100A/A+B): 100%

HYDROLOGY

☐ RECORDED DATA

Stream, lake or tidal gage Identifications:
Aerial photography Identifications:
Other Identifications:

☑ NO RECORDED DATA

☑ OBSERVATIONS:

Depth to Free Water: 6 inches
Depth to Saturation (including capillary fringe): 0 inches – saturated at surface
Altered Hydrology (explain): None observed

☐ Inundated ☑ Saturated within Upper 12" ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☑ Drainage Patterns

☐ OTHER (explain):

Project Title: Calais LNG **MP:** N/A (Terminal Site) **Transect:** B2 **Plot:** Wetland

SOIL Sketch landscape position of this plot. Indicate relative position of other plot(s) and the wetland flag if not on plan.

Wetland Plot Center ←25.5 feet → Wetland Boundary ←14.5 feet → Upland Plot Center

Submission of photo of plot is encouraged.

DEPTH (in.)	HORIZON	MATRIX COLOR	REDOXIMORPHIC FEATURES (color, abundance, size, contrast)	COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root distribution, soil water, etc)
+1 – 0	Oi	-	-	Fibric O horizon; balsam needles; partially decomposed herbaceous matter
0 – 7	Ap	2.5Y 3/2	10YR 4/4 f2p	Common fine roots; silt loam, approx. 5% sand; saturated
7 – 24	Bg	5Y 5/1	10YR 4/4 c2p	Silty clay loam; few medium roots, common fine roots; saturated

HYDRIC SOIL INDICATOR(S):
NEHSTC: VI – Depleted or Gleyed Matrix

REFERENCE(S):
New England Hydric Soils Technical Committee. 2004. 3rd ed., *Field Indicators for Identifying Hydric Soils in New England.* New England Interstate Water Pollution Control Commission, Lowell, MA.

OPTIONAL SOIL DATA

REFERENCE(S):

Taxonomic subgroup:
Soil drainage class:

CONCLUSIONS

	YES	NO	REMARKS:
Hydrophytic vegetation met?	☑	☐	
Hydric soils criterion met?	☑	☐	
Wetland hydrology met?	☑	☐	
Is this data point in a wetland?	☑	☐	

PROJECT TITLE: Calais LNG **MP:** N/A (Terminal Site) **TRANSECT**: B2 **PLOT**: Upland

EVALUATOR(S): WSM **DATE:** July 11, 2008

VEGETATION Stratum	Species	Dominance Ratio	Percent Dominance	DOM	NWI Status
Herbs/Seedlings	*Trientalis borealis* (starflower)	10.5/23.5	45%	X	FAC
	Dryopteris intermedia (evergreen woodfern)	3/23.5	13%		---
	Abies balsamea (balsam fir)	10.5/23.5	45%	X	FAC
Shrubs	*Abies balsamea* (balsam fir)	10.5/10.5	100%	X	FAC
Saplings	*Abies balsamea* (balsam fir)	10.5/13.5	78%	X	FAC
	Betula papyrifera (paper birch)	3/13.5	22%	X	FACU
Trees	*Thuja occidentalis* (northern white cedar)	786/1403	56%	X	FACW
	Abies balsamea (balsam fir)	368/1403	26%	X	FAC
	Betula papyrifera (paper birch)	249/1403	18%		---

HYDROPHYTES

0	1	5	0
OBL	FACW	FAC	*OTHER

NON-HYDROPHYTES

0	1	0
FAC-	FACU	UPL

Hydrophytes Subtotal (A): 6

Non-hydrophytes Subtotal (B): 1

Percent Hydrophytes (100A/A+B): 86%

HYDROLOGY

☐ RECORDED DATA

Stream, lake or tidal gage Identifications:
Aerial photography Identifications:
Other Identifications:

☑ NO RECORDED DATA

☑ OBSERVATIONS:

Depth to Free Water: > 21 inches
Depth to Saturation (including capillary fringe): > 21 inches
Altered Hydrology (explain): None

☐ Inundated ☐ Saturated within Upper 12" ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns

☐ OTHER (explain):

Project Title: Calais LNG | **MP:** N/A (Terminal Site) | **Transect:** B2 | **Plot:** Upland

SOIL Sketch landscape position of this plot. Indicate relative position of other plot(s) and the wetland flag if not on plan.

Wetland Plot Center ←25.5 feet → Wetland Boundary ←14.5 feet → Upland Plot Center

Submission of photo of plot is encouraged.

DEPTH (in)	HORIZON	MATRIX COLOR	REDOXIMORPHIC FEATURES (color, abundance, size, contrast)	COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root distribution, soil water, etc)
0 – 11	A	2.5Y 5/3	None	Silt loam; few coarse roots; moist soil; no redox; friable; few fine roots
11 – 21	B	5Y 5/2	10YR 4/6 c2p	Clay loam; few medium roots; slightly moist
>21	-	Not	Observed	-

HYDRIC SOIL INDICATOR(S):
None

REFERENCE(S):
New England Hydric Soils Technical Committee. 2004. 3rd ed., *Field Indicators for Identifying Hydric Soils in New England.* New England Interstate Water Pollution Control Commission, Lowell, MA.

OPTIONAL SOIL DATA

REFERENCE(S):

Taxonomic subgroup:
Soil drainage class:

CONCLUSIONS

	YES	NO	REMARKS:
Hydrophytic vegetation met?	☑	☐	
Hydric soils criterion met?	☐	☑	
Wetland hydrology met?	☐	☑	
Is this data point in a wetland?	☐	☑	

PROJECT TITLE: Calais LNG **MP:** 1.78 **TRANSECT:** B6 **PLOT**: Wetland

EVALUATOR(S): WSM **DATE:** July 15, 2008

VEGETATION

Stratum	Species	Dominance Ratio	Percent Dominance	DOM	NWI Status
Herbs/Seedlings	*Aralia nudicaulis* (wild sarsaparilla)	3/92.5	3%		---
	Dryopteris cristata (crested woodfern)	3/92.5	3%		---
	Osmunda cinnamomea (cinnamon fern)	38/92.5	41%	X	FACW
	Abies balsamea (balsam fir)	38/92.5	41%	X	FAC
	Carex disperma (soft leaf sedge)	10.5/92.5	11%		---
Mosses	*Sphagnum sp.* (sphagnum moss)	38/76	50%	X	OBL
	Hylocomium splendens (feather moss)	38/76	50%	X	NI
Shrubs	*Alnus rugosa* (speckled alder)	20.5/61.5	33%	X	FACW+
	*Ilex verticillata (*common winterberry)	3/61.5	5%		---
	Abies balsamea (balsam fir)	38/61.5	62%	X	FAC
Saplings	*Abies balsamea* (balsam fir)	63/84	75%	X	FAC
	Thuja occidentalis (northern white cedar)	10.5/84	13%		---
	Acer rubrum (red maple)	10.5/84	13%		---
Trees	*Thuja occidentalis* (northern white cedar)	687/946	73%	X	FACW
	Abies balsamea (balsam fir)	23/946	2%		---
	Acer rubrum (red maple)	236/946	25%	X	FAC

HYDROPHYTES				NON-HYDROPHYTES		
1	3	4	1	0	0	0
OBL	FACW	FAC	*OTHER	FAC-	FACU	UPL

Hydrophytes Subtotal (A): 8

Non-hydrophytes Subtotal (B): 0

Percent Hydrophytes (100A/A+B): 100%

HYDROLOGY

☐ RECORDED DATA

Stream, lake or tidal gage Identifications:
Aerial photography Identifications:
Other Identifications:

☑ NO RECORDED DATA

☑ OBSERVATIONS:

Depth to Free Water: 7 inches
Depth to Saturation (including capillary fringe): 0 inches – saturated at surface
Altered Hydrology (explain): None

☐ Inundated ☑ Saturated within Upper 12" ☐ Water Marks ☐ Drift Lines ☑ Sediment Deposits ☑ Drainage Patterns

☑ OTHER (explain):

Water stained leaves

Project Title: Calais LNG **MP:** 1.78 **Transect**: B6 **Plot:** Wetland

SOIL Sketch landscape position of this plot. Indicate relative position of other plot(s) and the wetland flag if not on plan.

Wetland Plot Center ←15 feet → Wetland Boundary ←15 feet → Upland Plot Center

Submission of photo of plot is encouraged.

DEPTH (in)	HORIZON	MATRIX COLOR	REDOXIMORPHIC FEATURES (color, abundance, size, contrast)	COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root distribution, soil water, etc)
0 – 19	Oe	10YR 2/1	None	Organic histosol; hemic; some silt; fine material; no roots; strong sulfidic odor; partially to mostly decomposed wood, needles, and leaves
>19	--	Rock	Refusal	-

HYDRIC SOIL INDICATOR(S):
NEHSTC: III – Histosol

REFERENCE(S):
New England Hydric Soils Technical Committee. 2004. 3rd ed., *Field Indicators for Identifying Hydric Soils in New England.* New England Interstate Water Pollution Control Commission, Lowell, MA.

OPTIONAL SOIL DATA

Taxonomic subgroup:
Soil drainage class:

REFERENCE(S):

CONCLUSIONS

	YES	NO	REMARKS:
Hydrophytic vegetation met?	☑	☐	
Hydric soils criterion met?	☑	☐	
Wetland hydrology met?	☑	☐	
Is this data point in a wetland?	☑	☐	

PROJECT TITLE: Calais LNG **MP**: 1.79 **TRANSECT:** B6 **PLOT**: Upland

EVALUATOR(S): WSM **DATE:** July 15, 2008

VEGETATION

Stratum	Species	Dominance Ratio	Percent Dominance	DOM	NWI Status
Herbs/Seedlings	*Maianthemum canadense* (Canada mayflower)	3/16.5	18%		---
	Vaccinium angustifolium (lowbush blueberry)	3/16.5	18%		---
	Aralia nudicaulis (wild sarsaparilla)	10.5/16.5	64%	X	FACU
Mosses	*Hylocomium splendens* (feather moss)	63/63	100%	X	NI
Shrubs	*Abies balsamea* (balsam fir)	63/63	100%	X	FAC
Saplings	*Abies balsamea* (balsam fir)	63/63	100%	X	FAC
Trees	*Thuja occidentalis* (northern white cedar)	230/756	31%	X	FACW
	Abies balsamea (balsam fir)	20/756	2		---
	Acer rubrum (red maple)	506/756	67%	X	FAC

HYDROPHYTES

0	1	3	0
OBL	FACW	FAC	*OTHER

NON-HYDROPHYTES

0	1	0
FAC-	FACU	UPL

Hydrophytes Subtotal (A): 4

Non-hydrophytes Subtotal (B): 1

Percent Hydrophytes (100A/A+B): 80%

HYDROLOGY

☐ RECORDED DATA

Stream, lake or tidal gage Identifications:
Aerial photography Identifications:
Other Identifications:

☑ NO RECORDED DATA

☑ OBSERVATIONS:

Depth to Free Water: > 16 inches
Depth to Saturation (including capillary fringe): > 16 inches
Altered Hydrology (explain): None

☐ Inundated ☐ Saturated within Upper 12" ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns

☐ OTHER (explain):

Project Title: Calais LNG **MP:** 1.79 **Transect:** B6 **Plot:** Upland

SOIL Sketch landscape position of this plot. Indicate relative position of other plot(s) and the wetland flag if not on plan.

Wetland Plot Center ←15 feet → Wetland Boundary ←15 feet → Upland Plot Center

Submission of photo of plot is encouraged.

DEPTH (in.)	HORIZON	MATRIX COLOR	REDOXIMORPHIC FEATURES (color, abundance, size, contrast)	COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root distribution, soil water, etc)
+1 - 0	0	-	-	Needle duff; leaf litter
0 - 3	A	2.5Y 2.5/1	None	Fine sand; common fine and medium roots; dry; no redox
3 - 5	E	7.5YR 6/1	None	Fine sand; few roots; dry
5 – 15	Bh	10YR 4/6	None	Sand; few roots; dry; rocky
>15 inches		Rock	Refusal	

HYDRIC SOIL INDICATOR(S):
None

REFERENCE(S):
New England Hydric Soils Technical Committee. 2004. 3rd ed., *Field Indicators for Identifying Hydric Soils in New England.* New England Interstate Water Pollution Control Commission, Lowell, MA.

OPTIONAL SOIL DATA

Taxonomic subgroup:
Soil drainage class:

REFERENCE(S):

CONCLUSIONS

	YES	NO	REMARKS:
Hydrophytic vegetation met?	☑	☐	
Hydric soils criterion met?	☐	☑	
Wetland hydrology met?	☐	☑	
Is this data point in a wetland?	☐	☑	

PROJECT TITLE: Calais LNG **MP:** 5.75 **TRANSECT**: H66 - **PLOT**: Wetland

EVALUATOR(S): AS, MPL **DATE:** 7/30/08

VEGETATION

Stratum	Species	Dominance Ratio	Percent Dominance	DOM	NWI Status
Herbs/Seedlings	*Sphagnum sp.* (sphagnum moss)	98/214.5	45%	X	OBL
	Ledum groenlandicum (bog labrador tea)	85.5/214.5	40%	X	OBL
	Chamaedaphne calyculata (leatherleaf)	10.5/214.5	5%		---
	Carex spp. (sedges)	20.5/214.5	10%		---
Shrubs	*Pinus strobus* (eastern white pine)	trace			
Saplings	None				
Trees	None				

HYDROPHYTES

OBL	FACW	FAC	*OTHER
2	0	0	0

NON-HYDROPHYTES

FAC-	FACU	UPL
0	0	0

Hydrophytes Subtotal (A):2

Non-hydrophytes Subtotal (B):0

Percent Hydrophytes (100A/A+B): 100%

HYDROLOGY

☐ RECORDED DATA

Stream, lake or tidal gage Identifications:
Aerial photography Identifications:
Other Identifications:

☑ NO RECORDED DATA

☑ OBSERVATIONS:

Depth to Free Water: 10 inches
Depth to Saturation (including capillary fringe):
Altered Hydrology (explain):

☑ Inundated ☑ Saturated within Upper 12" ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns

☑ OTHER (explain):

Project Title:Calais LNG **MP:** 5.75 **Transect:**H66 **Plot:** Wetland

SOIL Sketch landscape position of this plot. Indicate relative position of other plot(s) and the wetland flag if not on plan.

Upland plot 15 ft Wetland Boundary 20 ft Bog plot

Submission of photo of plot is encouraged.

DEPTH (in)	HORIZON	MATRIX COLOR	REDOXIMORPHIC FEATURES (color, abundance, size, contrast)	COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root distribution, soil water, etc)
2-0	Oi	Peat	-	-
0-20	Oe	10YR 3/1	-	Standing water at 10 inches. 50% fine roots and fibers.

HYDRIC SOIL INDICATOR(S):
III

REFERENCE(S):
New England Hydric Soils Technical Committee. 2004. 3rd ed., *Field Indicators for Identifying Hydric Soils in New England*. New England Interstate Water Pollution Control Commission, Lowell, MA.

OPTIONAL SOIL DATA
Thick O horizon/organic soils

Taxonomic subgroup:
Soil drainage class:

REFERENCE(S):

CONCLUSIONS

	YES	NO
Hydrophytic vegetation met?	☑	☐
Hydric soils criterion met?	☑	☐
Wetland hydrology met?	☑	☐
Is this data point in a wetland?	☑	☐

REMARKS:
Bog.

PROJECT TITLE: Calais LNG **MP:**5.76 **TRANSECT**: H66 **PLOT**: Upland

EVALUATOR(S): AS, MPL **DATE:** 7/30/08

VEGETATION Stratum	Species	Dominance Ratio	Percent Dominance	DOM	NWI Status
Herbs/Seedlings	*Vaccinium angustifolium* (lowbush blueberry)	63/79.5	79%		FACU
	Gaultheria procumbens (eastern teaberry)	10.5/79.5	13%		---
	Pteridium aquilinum (brackenfern)	3/79.5	4%		---
	Aralia nudicaulis (wild sarsaparilla)	3/79.5	4%		---
Shrubs	*Pinus strobus* (eastern white pine)	10.5/13.5	78%	X	FACU
	Betula papyrifera (paper birch)	3/13.5	22%	X	FACU
Saplings	*Pinus strobus* (eastern white pine)	126/145	87%		FACU
	Betula papyrifera (paper birch)	19/145	13%		---
Trees	*Populus grandidentata* (big tooth aspen)	206/750	27%	X	FAC
	Pinus strobus (eastern white pine)	412/750	55%	X	FACU
	Pinus resinosa (red pine)	132/750	18%		---

HYDROPHYTES

0	0	1	0
OBL	FACW	FAC	*OTHER

NON-HYDROPHYTES

0	5	0
FAC-	FACU	UPL

Hydrophytes Subtotal (A):1

Non-hydrophytes Subtotal (B):5

Percent Hydrophytes (100A/A+B): 0%

HYDROLOGY

☐ RECORDED DATA

Stream, lake or tidal gage Identifications:
Aerial photography Identifications:
Other Identifications:

☑ NO RECORDED DATA

☑ OBSERVATIONS:

Depth to Free Water: None observed
Depth to Saturation (including capillary fringe): None observed
Altered Hydrology (explain): None observed

☐ Inundated ☐ Saturated within Upper 12" ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns

☐ OTHER (explain):

Project Title: Calais LNG **MP:** 5.76 **Transect:** H66 **Plot:** Upland

SOIL Sketch landscape position of this plot. Indicate relative position of other plot(s) and the wetland flag if not on plan.

Upland plot 15 ft Wetland Boundary 20 ft Bog plot

Submission of photo of plot is encouraged.

DEPTH (in)	HORIZON	MATRIX COLOR	REDOXIMORPHIC FEATURES (color, abundance, size, contrast)	COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root distribution, soil water, etc)
2-0	O	-	-	
0-0.5	A	10YR 3/2	-	Silt loam, 20% fine roots
0.5-8	B_1	10YR 5/6	-	Fine sandy loam, 5% fine roots, 20% loose particles
8-20+	B_2	2.5Y 6/4	-	Silt loam, no roots, 20% course particles

HYDRIC SOIL INDICATOR(S):
None

REFERENCE(S):
New England Hydric Soils Technical Committee. 2004. 3rd ed., *Field Indicators for Identifying Hydric Soils in New England*. New England Interstate Water Pollution Control Commission, Lowell, MA.

OPTIONAL SOIL DATA
:
Taxonomic subgroup:
Soil drainage class:

REFERENCE(S):

CONCLUSIONS

	YES	NO	REMARKS:
Hydrophytic vegetation met?	☐	☑	
Hydric soils criterion met?	☐	☑	
Wetland hydrology met?	☐	☑	
Is this data point in a wetland?	☐	☐	

PROJECT TITLE: Calais LNG **MP:** 6.28 **TRANSECT**: H64 **PLOT**: Wetland

EVALUATOR(S): A.S., M.P.L **DATE:** July 31, 2008

VEGETATION

Stratum	Species	Dominance Ratio	Percent Dominance	DOM	NWI Status
Herbs/Seedlings	*Carex scoparia (broom-like sedge)*	10.5/37.5	28	X	FACW
	*Eleocharis (spikerush)**	10.5/37.5	28	X	FACW*
	Juncus effusus (soft rush)	10.5/37.5	28	X	FACW
	Populus tremuloides (quaking aspen)	3/37.5	8		---
	Gallium sp. (bedstraw)	3/37.5	8		---
Shrubs	*Populus tremuloides* (quaking aspen)	10.5/10.5	100	X	FACU
Saplings	*Tsuga canadensis* (eastern hemlock)	3/3	100	X	FACU
Trees	*Thuja occidentalis* (northern white cedar)	297.6/533.1	56	X	FACW
	Tsuga canadensis (eastern hemlock)	235.5/533.1	44	X	FACU

* Although the spikerush in this plot could not be identified to species

HYDROPHYTES

0	4	0	0
OBL	FACW	FAC	*OTHER

NON-HYDROPHYTES

0	3	0
FAC-	FACU	UPL

Hydrophytes Subtotal (A): 6

Non-hydrophytes Subtotal (B): 3

Percent Hydrophytes (100A/A+B): 57%

HYDROLOGY

☐ RECORDED DATA

Stream, lake or tidal gage Identifications:
Aerial photography Identifications:
Other Identifications:

☐ NO RECORDED DATA

☑ OBSERVATIONS:

Depth to Free Water: 0”
Depth to Saturation (including capillary fringe): N/A
Altered Hydrology (explain): None observed

☐ Inundated ☑ Saturated within Upper 12" ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☑ Drainage Patterns

☐ OTHER (explain):

Project Title: Calais LNG | **MP:** 6.28 | **Transect:** H64 | **Plot**: Wetland

SOIL Sketch landscape position of this plot. Indicate relative position of other plot(s) and the wetland flag if not on plan.

Submission of photo of plot is encouraged.

DEPTH	HORIZON	MATRIX COLOR	REDOXIMORPHIC FEATURES (color, abundance, size, contrast)	COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root distribution, soil water, etc)
0 - 1	A	10YR 4/2	----------	Silt loam, 10% coarse fragments, no redox. Water at surface.
1 - 10	B1	5GY 4/1	10YR 5/6 c2p	Silty clay loam, 5% fine roots, 10% coarse particles. Water to surface.
10 - 20	B2	5GY 4/1	10YR 5/6 f2p 10YR 2/1 Mn concentrations, m1p	Silty clay loam, no roots, water to surface, gravel intermixed (10%) inch-long

HYDRIC SOIL INDICATOR(S): VI

REFERENCE(S):
New England Hydric Soils Technical Committee. 2004. 3rd ed., *Field Indicators for Identifying Hydric Soils in New England.* New England Interstate Water Pollution Control Commission, Lowell, MA.

OPTIONAL SOIL DATA:

REFERENCE(S):

Taxonomic subgroup:

Soil drainage class:

CONCLUSIONS

	YES	NO	REMARKS:
Hydrophytic vegetation met?	☑	☐	
Hydric soils criterion met?	☑	☐	
Wetland hydrology met?	☑	☐	
Is this data point in a wetland?	☑	☐	

PROJECT TITLE: Calais LNG **MP:** 6.27 **TRANSECT**: H64 **PLOT**: Upland

EVALUATOR(S): A.S., M.P.L **DATE:** July 31, 2008

VEGETATION Stratum	Species	Dominance Ratio	Percent Dominance	DOM	NWI Status
Herbs/Seedlings	*Populus tremuloides* (quaking aspen)	20.5/34	60	X	FACU
	Tsuga canadensis (eastern hemlock)	10.5/34	31	X	FACU
	Rubus pubescens (dwarf blackberry)	3/34	9		---
Shrubs	*Populus tremuloides* (quaking aspen)	20.5/31	66	X	FACU
	Populus grandidentata (big tooth aspen)	10.5/31	34	X	FACU-
Trees	*Thuja occidentalis* (northern white cedar)	402.7/818.7	49	X	FACW
	Pinus strobus (eastern white pine)	226/818.7	28	X	FACU
	Populus grandidentata (big tooth aspen)	113/818.7	14		---
	Tsuga canadensis (eastern hemlock)	38.5/818.7	5		---
	Betula populifolia (gray birch)	38.5/818.7	5		---

HYDROPHYTES				NON-HYDROPHYTES		
0	1	0	0	0	5	0
OBL	FACW	FAC	*OTHER	FAC-	FACU	UPL

Hydrophytes Subtotal (A): 1

Non-hydrophytes Subtotal (B): 5

Percent Hydrophytes (100A/A+B): 17%

HYDROLOGY

☐ RECORDED DATA

Stream, lake or tidal gage Identifications:
Aerial photography Identifications:
Other Identifications:

☑ NO RECORDED DATA

☐ OBSERVATIONS:

Depth to Free Water: Not observed
Depth to Saturation (including capillary fringe): Not observed
Altered Hydrology (explain): None observed

☐ Inundated ☐ Saturated within Upper 12" ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns

☐ OTHER (explain):

Project Title: Calais LNG | **MP:** 6.27 | **Transect:** H64 | **Plot:** Upland

SOIL Sketch landscape position of this plot. Indicate relative position of other plot(s) and the wetland flag if not on plan.

Wetland Plot Center ←15 feet → Wetland Boundary ←15 feet → Upland Plot Center

Submission of photo of plot is encouraged.

DEPTH	HORIZON	MATRIX COLOR	REDOXIMORPHIC FEATURES (color, abundance, size, contrast)	COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root distribution, soil water, etc)
2-0	O	Org.	----------	----------
0-2	A	2.5YR 4/3	----------	Silt loam, 5% coarse fragments, 10% fine roots
2-10	B1	10YR 5/6	----------	Silt loam, 10% coarse fragments, <5% fine roots
10-20	B2	10YR 5/4	----------	Silt loam, 15% coarse fragments, <5% fine roots

HYDRIC SOIL INDICATOR(S): N/A

REFERENCE(S):
New England Hydric Soils Technical Committee. 2004. 3rd ed., *Field Indicators for Identifying Hydric Soils in New England.* New England Interstate Water Pollution Control Commission, Lowell, MA.

OPTIONAL SOIL DATA:

Taxonomic subgroup:

Soil drainage class:

REFERENCE(S):

CONCLUSIONS

	YES	NO	REMARKS:
Hydrophytic vegetation met?	☐	☑	
Hydric soils criterion met?	☐	☑	
Wetland hydrology met?	☐	☑	
Is this data point in a wetland?	☐	☑	

PROJECT TITLE: Calais LNG **MP:** 6.93 **TRANSECT**: F3 (Flag 28) **PLOT**: Wetland

EVALUATOR(S): L.L. **DATE:** August 1, 2008

VEGETATION Stratum	Species	Dominance Ratio	Percent Dominance	DOM	NWI Status
Herbs/Seedlings	*Salix petiolaris* (slender willow)	38/120.5	32	X	OBL
	Agrostis gigantea (redtop)	38/120.5	32	X	FACW
	Potentilla simplex (common cinquefoil)	20.5/120.5	17		---
	Trifolium repens (white clover)	10.5/120.5	9		---
	Carex scoparia (broom-sedge)	10.5/120.5	9		---
	Aster novi-belgii (New York aster)	3/120.5	2		---

HYDROPHYTES				NON-HYDROPHYTES		
1	1	0	0	0	0	0
OBL	FACW	FAC	*OTHER	FAC-	FACU	UPL

Hydrophytes Subtotal (A): 2

Non-hydrophytes Subtotal (B): 0

Percent Hydrophytes (100A/A+B): 100%

HYDROLOGY

☐ RECORDED DATA

Stream, lake or tidal gage Identifications:
Aerial photography Identifications:
Other Identifications:

☑ NO RECORDED DATA

☑ OBSERVATIONS:

Depth to Free Water: 8 inches
Depth to Saturation (including capillary fringe): 0 inches – at surface
Altered Hydrology (explain): None observed

☐ Inundated ☑ Saturated within Upper 12" ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns

☐ OTHER (explain):

Project Title: Calais LNG | **MP:** 6.93 | **Transect:** F-3, Flag 28 | **Plot:** Wetland

SOIL Sketch landscape position of this plot. Indicate relative position of other plot(s) and the wetland flag if not on plan.

Wetland Plot Center ←10 feet → Wetland Boundary ←15 feet → Pit B Upland Plot Center

Submission of photo of plot is encouraged.

DEPTH (in)	HORIZON	MATRIX COLOR	REDOXIMORPHIC FEATURES (color, abundance, size, contrast)	COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root distribution, soil water, etc)
0-2	A	2.5YR 4/3	10YR 4/6 c2d	Silt Loam
2-8	Bg	5YR 5/2	10YR 4/6 m2d	Silt Loam

HYDRIC SOIL INDICATOR(S): VI

REFERENCE(S):
New England Hydric Soils Technical Committee. 2004. 3rd ed., *Field Indicators for Identifying Hydric Soils in New England.* New England Interstate Water Pollution Control Commission, Lowell, MA.

OPTIONAL SOIL DATA:

REFERENCE(S):

Taxonomic subgroup:

Soil drainage class:

CONCLUSIONS

	YES	NO
Hydrophytic vegetation met?	☑	☐
Hydric soils criterion met?	☑	☐
Wetland hydrology met?	☑	☐
Is this data point in a wetland?	☑	☐

REMARKS:
Adjacent to construction fill stockpile & recent ditch draining vernal pool.
Fill @ flags F3 – F55
Adjacent to construction areas
Wet meadow hayfield

PROJECT TITLE: Calais LNG **MP:** 6.94 **TRANSECT**: F3 (Flag 28) **PLOT**: Upland

EVALUATOR(S): L.L. **DATE:** August 1, 2008

VEGETATION

Stratum	Species	Dominance Ratio	Percent Dominance	DOM	NWI Status
Herbs/Seedlings	*Potentilla simplex* (common cinquefoil)	38/119	32	X	FACU-
	Agrostis perennans (upland bentgrass)	38/119	32	X	FACU
	Fragaria virginiana (wild strawberry)	20.5/119	17		---
	Betula populifolia (gray birch)	10.5/119	9		---
	Hieraceum pretense (field hawkweed)	3/119	3		---
	Trifolium pretanse (red clover)	3/119	3		---
	Salix petiolaris (slender willow)	3/119	3		---
	Spiraea alba var. latifolia (eastern meadowsweet)	3/119	3		---

HYDROPHYTES				NON-HYDROPHYTES		
0	0	0	0	0	2	0
OBL	FACW	FAC	*OTHER	FAC-	FACU	UPL

Hydrophytes Subtotal (A): 0

Non-hydrophytes Subtotal (B): 2

Percent Hydrophytes (100A/A+B): 0%

HYDROLOGY

☐ RECORDED DATA

Stream, lake or tidal gage Identifications:
Aerial photography Identifications:
Other Identifications:

☑ NO RECORDED DATA

☑ OBSERVATIONS:

Depth to Free Water: > 12 inches
Depth to Saturation (including capillary fringe): >12 inches
Altered Hydrology (explain): None observed

☐ Inundated ☐ Saturated within Upper 12" ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns

☐ OTHER (explain):

Project Title: Calais LNG | **MP:** 6.94 | **Transect:** F3, Flag 28 | **Plot:** Upland

SOIL Sketch landscape position of this plot. Indicate relative position of other plot(s) and the wetland flag if not on plan.

Wetland Plot Center) ←10 feet → Wetland Boundary ←15 feet Upland Plot Center

Submission of photo of plot is encouraged.

DEPTH (in)	HORIZON	MATRIX COLOR	REDOXIMORPHIC FEATURES (color, abundance, size, contrast)	COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root distribution, soil water, etc)
0-2	AB	2.5YR 4/2	----------	Silt Loam
2-4	Bw1	2.5YR 5/3	----------	Silt Loam
4-7	Bw2	2.5YR 5/3	2.5YR 5/2 c2f	Silt Loam
7-10+	Bg	2.5YR 5/2	10YR 4/6 c2d	Silt Loam

HYDRIC SOIL INDICATOR(S): Non-Hydric

REFERENCE(S):
New England Hydric Soils Technical Committee. 2004. 3rd ed., *Field Indicators for Identifying Hydric Soils in New England.* New England Interstate Water Pollution Control Commission, Lowell, MA.

OPTIONAL SOIL DATA:

Taxonomic subgroup:
Soil drainage class:

REFERENCE(S):

CONCLUSIONS

	YES	NO
Hydrophytic vegetation met?	☐	☐
Hydric soils criterion met?	☐	☐
Wetland hydrology met?	☐	☐
Is this data point in a wetland?	☐	☐

REMARKS:
Plot is located in maintained hayfield.

PROJECT TITLE: Calais LNG **MP**: 10.67 **TRANSECT:** E20 **PLOT**: Wetland

EVALUATOR(S): L.L, R.M. **DATE:** July 26, 2008

VEGETATION

Stratum	Species	Dominance Ratio	Percent Dominance	DOM	NWI Status
Herbs/Seedlings	*Calamagrostis canadensis* (bluejoint)	63/66	95	X	FACW+
	Onoclea sensibilis (sensitive fern)	3/66	5		---
Shrubs	*Spiraea alba var. latifolia* (eastern meadowsweet)	85.5/150	57	X	FAC+
	Alunus incana ssp. rugosa (speckled alder)	38/150	25	X	FACW+
	Abies balsamea (balsam fir)	20.5/150	14		---
	Acer rubrum (red maple)	3/150	2		---
	Rosa virginiana (virginia rose)	3/150	2		---
Trees	*Abies balsamea* (balsam fir)	19.6/19.6	100	X	FAC

HYDROPHYTES

0	2	2	0
OBL	FACW	FAC	*OTHER

NON-HYDROPHYTES

0	0	0
FAC-	FACU	UPL

Hydrophytes Subtotal (A): 4

Non-hydrophytes Subtotal (B): 0

Percent Hydrophytes (100A/A+B): 100%

HYDROLOGY

☐ RECORDED DATA

Stream, lake or tidal gage Identifications:
Aerial photography Identifications:
Other Identifications:

☑ NO RECORDED DATA

☑ OBSERVATIONS:

Depth to Free Water: Ponded + 5''
Depth to Saturation (including capillary fringe): N/A
Altered Hydrology (explain): None observed

☑ Inundated ☐ Saturated within Upper 12" ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns

☐ OTHER (explain):

Project Title: Calais LNG | **MP:** 10.67 | **Transect:** E20 | **Plot:** Wetland

SOIL Sketch landscape position of this plot. Indicate relative position of other plot(s) and the wetland flag if not on plan.

Wetland Plot Center ←15 feet → Wetland Boundary ←6 feet → Upland Plot Center

Submission of photo of plot is encouraged.

DEPTH	HORIZON	MATRIX COLOR	REDOXIMORPHIC FEATURES (color, abundance, size, contrast)	COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root distribution, soil water, etc)
0 - 12	Ap	2.5YR 3/1	None	Disturbed soils, high fibric content.
12 - 16	Bg	5GY 5/1	None	Gleyed.

HYDRIC SOIL INDICATOR(S): VII

REFERENCE(S):
New England Hydric Soils Technical Committee. 2004. 3rd ed., *Field Indicators for Identifying Hydric Soils in New England.* New England Interstate Water Pollution Control Commission, Lowell, MA.

OPTIONAL SOIL DATA:

Taxonomic subgroup:

Soil drainage class:

REFERENCE(S):

CONCLUSIONS

	YES	NO
Hydrophytic vegetation met?	☑	☐
Hydric soils criterion met?	☑	☐
Wetland hydrology met?	☑	☐
Is this data point in a wetland?	☑	☐

REMARKS:
Powerline Clearing

PROJECT TITLE: Calais LNG **MP:** 10.67 **TRANSECT**: E20 **PLOT**: Upland

EVALUATOR(S): L.L., R.M. **DATE:** July 26, 2008

VEGETATION

Stratum	Species	Dominance Ratio	Percent Dominance	DOM	NWI Status
Herbs/Seedlings	*Aralia nudicaulis* (wild sarsaparilla)	10.5/16.5	64	X	FACU
	Aster macrophyllus (large leaved aster)	3/16.5	18		---
	Lonicera canadensis (American fly honeysuckle)	3/16.5	18		---
Shrubs	*Abies balsamea* (balsam fir)	20.5/34	60	X	FAC
	Lonicera canadensis (American fly honeysuckle)	10.5/34	31	X	FACU
	Thuja occidentalis (northern white cedar)	3/34	9		---
Sapling	*Acer rubrum (red maple)*	20.5/34	60	X	FAC
	Quercus rubra (red oak)	10.5/34	31	X	FACU-
	Poplus grandidentata (big tooth aspen)	3/34	9		---
Trees	*Poplus grandidentata* (big tooth aspen)	247/548	45	X	FACU-
	Thuja occidentalis (northern white cedar)	154/548	28	X	FACW
	Picea glauca (white spruce)	79/548	14		---
	Abies balsamea (balsam fir)	39/548	7		---
	Quercus rubra (red oak)	29/548	5		---

HYDROPHYTES

0	1	2	0
OBL	FACW	FAC	*OTHER

NON-HYDROPHYTES

0	4	0
FAC-	FACU	UPL

Hydrophytes Subtotal (A): 3

Non-hydrophytes Subtotal (B): 4

Percent Hydrophytes (100A/A+B): 43%

HYDROLOGY

☐ RECORDED DATA

Stream, lake or tidal gage	Identifications:
Aerial photography	Identifications: > 15 inches
Other	Identifications: None observed

☑ NO RECORDED DATA

☑ OBSERVATIONS:

Depth to Free Water: >15 inches
Depth to Saturation (including capillary fringe): >15 inches
Altered Hydrology (explain): None observed

☐ Inundated ☐ Saturated within Upper 12" ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns

☐ OTHER (explain):

Project Title: Calais LNG **MP:**10.67 **Transect:** E20 **Plot:** Upland

SOIL Sketch landscape position of this plot. Indicate relative position of other plot(s) and the wetland flag if not on plan.

Wetland Plot Center ←15 feet → Wetland Boundary ←6 feet → Upland Plot Center

Submission of photo of plot is encouraged.

DEPTH	HORIZON	MATRIX COLOR	REDOXIMORPHIC FEATURES (color, abundance, size, contrast)	COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root distribution, soil water, etc)
0-2	A	10YR 5/3	None	Silt Loam
2-15	Bw	2.5YR 5/4	None	Silt Loam

HYDRIC SOIL INDICATOR(S): Non-Hydric

REFERENCE(S):
New England Hydric Soils Technical Committee. 2004. 3rd ed., *Field Indicators for Identifying Hydric Soils in New England.* New England Interstate Water Pollution Control Commission, Lowell, MA.

OPTIONAL SOIL DATA:

REFERENCE(S):

Taxonomic subgroup:

Soil drainage class:

CONCLUSIONS

	YES	NO	REMARKS:
Hydrophytic vegetation met?	☐	☑	
Hydric soils criterion met?	☐	☑	
Wetland hydrology met?	☐	☑	
Is this data point in a wetland?	☐	☑	

PROJECT TITLE: Calais LNG **MP:** 11.44 **TRANSECT**: C24 **PLOT**: Wetland

EVALUATOR(S): L.L., R.M. **DATE:** July 26, 2008

VEGETATION

Stratum	Species	Dominance Ratio	Percent Dominance	DOM	NWI Status
Herbs/Seedlings	*Carex scoparia* (broom-sedge)	85.5/157.5	54	X	FACW
	Agrostis gigantea (redtop)	38/157.5	24	X	FACW
	Scirpus atrovirens (dark-green bulrush)	20.5/157.5	13		---
	Potentilla simplex (common cinquefoil)	10.5/157.5	7		---
	Hypericum ellipticum (Pale St. John's wort)	3/157.5	2		---

HYDROPHYTES

OBL	FACW	FAC	*OTHER
0	2	0	0

NON-HYDROPHYTES

FAC-	FACU	UPL
0	0	0

Hydrophytes Subtotal (A): 1

Non-hydrophytes Subtotal (B): 1

Percent Hydrophytes (100A/A+B): 100%

HYDROLOGY

☐ RECORDED DATA

Stream, lake or tidal gage Identifications:
Aerial photography Identifications:
Other Identifications:

☑ NO RECORDED DATA

☑ OBSERVATIONS:

Depth to Free Water: 5 inches
Depth to Saturation (including capillary fringe): 0 inches (surface)
Altered Hydrology (explain): None observed

☐ Inundated ☐ Saturated within Upper 12" ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns

☑ OTHER (explain):

Water Stained Litter

Project Title: Calais LNG | **MP:** 11.44 | **Transect:** C24 | **Plot:** Wetland

SOIL Sketch landscape position of this plot. Indicate relative position of other plot(s) and the wetland flag if not on plan.
See Upland sketch

Wetland Plot Center ←15 feet → Wetland Boundary ←10 feet → Upland Plot Center

Submission of photo of plot is encouraged.

DEPTH	HORIZON	MATRIX COLOR	REDOXIMORPHIC FEATURES (color, abundance, size, contrast)	COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root distribution, soil water, etc)
0-9	AB	2.5YR 5/3	Oxidized rhizospheres, mp1	Silt Loam
9-15	Bg	5YR 5/3	7.5YR 2.5/1 Mn, m1p 5YR 5/2 m2f	Silt Loam

HYDRIC SOIL INDICATOR(S): XIII – Altered, stripped hayfield-topsoil removed.
Redox to soil surface.

REFERENCE(S):
New England Hydric Soils Technical Committee. 2004. 3rd ed., *Field Indicators for Identifying Hydric Soils in New England.* New England Interstate Water Pollution Control Commission, Lowell, MA.

OPTIONAL SOIL DATA:

Taxonomic subgroup:

Soil drainage class:

REFERENCE(S):

CONCLUSIONS

	YES	NO
Hydrophytic vegetation met?	☑	☐
Hydric soils criterion met?	☑	☐
Wetland hydrology met?	☑	☐
Is this data point in a wetland?	☑	☐

REMARKS:
Altered hayfield – topsoil removed.

PROJECT TITLE: Calais LNG **MP:** 11.44 **TRANSECT**: C24 **PLOT**: Upland

EVALUATOR(S): L.L., R.M. **DATE:** July 26, 2008

VEGETATION

Stratum	Species	Dominance Ratio	Percent Dominance	DOM	NWI Status
Herbs/Seedlings	*Danthonia spicata* (wild oatgrass)	63/129	49	X	UPL
	Potentilla simplex (common cinquefoil)	63/129	49	X	FACU-
	Carex sp. (unidentifiable sedge)	3/129	2		---

HYDROPHYTES

0	0	0	0
OBL	FACW	FAC	*OTHER

NON-HYDROPHYTES

0	1	1
FAC-	FACU	UPL

Hydrophytes Subtotal (A): 0

Non-hydrophytes Subtotal (B): 2

Percent Hydrophytes (100A/A+B): 0%

HYDROLOGY

☐ RECORDED DATA

Stream, lake or tidal gage Identifications:
Aerial photography Identifications:
Other Identifications:

☑ NO RECORDED DATA

☑ OBSERVATIONS:

Depth to Free Water: > 15 inches
Depth to Saturation (including capillary fringe): >15 inches
Altered Hydrology (explain): None observed

☐ Inundated ☐ Saturated within Upper 12" ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns

☐ OTHER (explain):

Project Title: Calais LNG | **MP:** 11.44 | **Transect:** C24 | **Plot:** Upland

SOIL Sketch landscape position of this plot. Indicate relative position of other plot(s) and the wetland flag if not on plan.

Wetland Plot Center ←15 feet → Wetland Boundary ←10 feet → Upland Plot Center

Submission of photo of plot is encouraged.

DEPTH	HORIZON	MATRIX COLOR	REDOXIMORPHIC FEATURES (color, abundance, size, contrast)	COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root distribution, soil water, etc)
0-7	A	10YR 4/3	Many fine oxidized rhizospheres	Silt loam
7-11	Bw	2.5YR 5/4	10YR 4/4 conc., c2d	Silt loam
11	Bg	5YR 5/3	7.5YR 2.5/1 Mn concentrations, m1p 5YR 5/2, m2f	Silt loam

HYDRIC SOIL INDICATOR(S):
Non-Hydric

REFERENCE(S):
New England Hydric Soils Technical Committee. 2004. 3rd ed., *Field Indicators for Identifying Hydric Soils in New England.* New England Interstate Water Pollution Control Commission, Lowell, MA.

OPTIONAL SOIL DATA:

Taxonomic subgroup:

Soil drainage class:

REFERENCE(S):

CONCLUSIONS

	YES	NO	REMARKS:
Hydrophytic vegetation met?	☐	☑	
Hydric soils criterion met?	☐	☑	
Wetland hydrology met?	☐	☑	
Is this data point in a wetland?	☐	☑	

PROJECT TITLE: Calais LNG **MP:** 13.78 **TRANSECT**:D7 **PLOT**: Wetland

EVALUATOR(S): A.S., M.P.L **DATE:** August 1, 2008

VEGETATION Stratum	Species	Dominance Ratio	Percent Dominance	DOM	NWI Status
Herbs/Seedlings	Carex sp. (unknown sedge)	38/48.5	78	X	NI
	Equisetum sylvaticum (wood horsetail)	10.5/48.5	22		FACW
Shrubs	*Hamamelis virginiana* (american witch-hazel)	10.5/13.5	78	X	FAC-
	Acer rubrum (red maple)	3/13.5	22	X	FAC
Sapling	*Abies balsamea* (balsam fir)	38/44	86	X	FAC
	Acer rubrum (red maple)	3/44	7		---
	Thuja occidentalis (northern white cedar)	3/44	7		---
Trees	*Abies balsamea* (balsam fir)	399.6/570.8	70	X	FAC
	Thuja occidentalis (northern white cedar)	132.7/570.8	23	X	FACW
	Betula populifolia (gray birch)	38.5/570.8	7		---

HYDROPHYTES:

0	2	3	0
OBL	FACW	FAC	*OTHER

NON-HYDROPHYTES:

1	0	0
FAC-	FACU	UPL

Hydrophytes Subtotal (A): 6

Non-hydrophytes Subtotal (B): 1

Percent Hydrophytes (100A/A+B): 86%

HYDROLOGY

☐ RECORDED DATA

Stream, lake or tidal gage Identifications:
Aerial photography Identifications:
Other Identifications:

☑ NO RECORDED DATA

☐ OBSERVATIONS:

Depth to Free Water: 14 inches
Depth to Saturation (including capillary fringe): < 12 inches
Altered Hydrology (explain): None observed

☐ Inundated ☑ Saturated within Upper 12" ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☑ Drainage Patterns

☐ OTHER (explain):

Project Title: Calais LNG | **MP:** 13.78 | **Transect:** D7 | **Plot:** Wetland

SOIL Sketch landscape position of this plot. Indicate relative position of other plot(s) and the wetland flag if not on plan.

Wetland Plot Center ←15 feet → Wetland Boundary ←15 feet → Upland Plot Center

Submission of photo of plot is encouraged.

DEPTH	HORIZON	MATRIX COLOR	REDOXIMORPHIC FEATURES (color, abundance, size, contrast)	COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root distribution, soil water, etc)
1-0	O	----------	----------	----------
0-4	A	2.5Y 4/1	----------	Silt loam, 5% fine roots, 10% coarse particles
4-16	Bg	2.5Y 6/2	2.5YR 6/6, c2d	Restrictive layer at 16 inches. Silt loam, 30% coarse particles, no roots. Water at 14 inches

HYDRIC SOIL INDICATOR(S): VI

REFERENCE(S):
New England Hydric Soils Technical Committee. 2004. 3rd ed., *Field Indicators for Identifying Hydric Soils in New England.* New England Interstate Water Pollution Control Commission, Lowell, MA.

OPTIONAL SOIL DATA:

Taxonomic subgroup:

Soil drainage class:

REFERENCE(S):

CONCLUSIONS

	YES	NO
Hydrophytic vegetation met?	☑	☐
Hydric soils criterion met?	☑	☐
Wetland hydrology met?	☑	☐
Is this data point in a wetland?	☑	☐

REMARKS:
***Narrow Wetland area. Upland vegetation excluded. Approximately ½ of wetland plot extends into easement.

PROJECT TITLE: Calais LNG **MP:** 13.79 **TRANSECT**: D7 **PLOT**: Upland

EVALUATOR(S): A.S., M.P.L **DATE:** August 1, 2008

VEGETATION Stratum	Species	Dominance Ratio	Percent Dominance	DOM	NWI Status
Herbs/Seedlings	*Osmunda claytoniana* (interrupted fern)	20.5/46	45	X	FAC
	Thelypteris noveboracensis (New York fern)	10.5/46	23	X	FAC
	Abies balsamea (balsam fir)	3/46	7		---
	Aralia nudicaulis (wild sarsaparilla)	3/46	7		---
	Cornus canadensis (bunchberry)	3/46	7		---
	Trientalis borealis (American starflower)	3/46	7		---
	Maianthemum canadense (Canada mayflower)	3/46	7		---
Shrubs	*Hamamelis virginiana* (American witch-hazel)	20.5/23.5	87	X	FAC-
	Abies balsamea (balsam fir)	3/23.5	13		---
Sapling	*Acer rubrum* (red maple)	38/61.5	62	X	FAC
	Populus tremuloides (quaking aspen)	20.5/61.5	33	X	FACU
	Betula populifolia (gray birch)	3/61.5	5		---
Trees	*Abies balsamea* (balsam fir)	558.5/790.9	71	X	FAC
	Thuja occidentalis (northern white cedar)	153.9/790.9	19		---
	Betula populifolia (gray birch)	78.5/790.9	10		---

HYDROPHYTES

0	0	4	0
OBL	FACW	FAC	*OTHER

NON-HYDROPHYTES

1	1	0
FAC-	FACU	UPL

Hydrophytes Subtotal (A): 4

Non-hydrophytes Subtotal (B): 2

Percent Hydrophytes (100A/A+B): 67%

HYDROLOGY

☐ RECORDED DATA

Stream, lake or tidal gage Identifications:
Aerial photography Identifications:
Other Identifications:

☑ NO RECORDED DATA

☐ OBSERVATIONS:

Depth to Free Water: None observed
Depth to Saturation (including capillary fringe): None observed
Altered Hydrology (explain): None Observed

☐ Inundated ☐ Saturated within Upper 12" ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns

☐ OTHER (explain):

Project Title: Calais LNG | **MP:** 13.79 | **Transect:** D7 | **Plot:** Upland

SOIL Sketch landscape position of this plot. Indicate relative position of other plot(s) and the wetland flag if not on plan.

Wetland Plot Center ←15 feet → Wetland Boundary ←15 feet → Upland Plot Center

Submission of photo of plot is encouraged.

DEPTH	HORIZON	MATRIX COLOR	REDOXIMORPHIC FEATURES (color, abundance, size, contrast)	COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root distribution, soil water, etc)
1-0	O	----------	----------	
0-2	A	2.5Y 3/1	None	Silt loam, 5% coarse roots, 10% fine roots
2-10	B1	10YR 4/4	None	Silt loam, 5% coarse roots, 10% fine roots, 5% coarse particles
10+	B2	2.5Y 5/3	None	Silt loam, 5% coarse roots, 3% fine roots, 10% coarse particles

HYDRIC SOIL INDICATOR(S): Non-hydric

REFERENCE(S):
New England Hydric Soils Technical Committee. 2004. 3rd ed., *Field Indicators for Identifying Hydric Soils in New England.* New England Interstate Water Pollution Control Commission, Lowell, MA.

OPTIONAL SOIL DATA:

Taxonomic subgroup:

Soil drainage class:

REFERENCE(S):

CONCLUSIONS

	YES	NO	REMARKS:
Hydrophytic vegetation met?	☐	☑	
Hydric soils criterion met?	☐	☑	
Wetland hydrology met?	☐	☑	
Is this data point in a wetland?	☐	☑	

PROJECT TITLE: Calais LNG **MP:** 14.31 **TRANSECT**: H11 **PLOT**: Wetland

EVALUATOR(S): A.S., M.P.L **DATE:** August 1, 2008

VEGETATION

Stratum	Species	Dominance Ratio	Percent Dominance	DOM	NWI Status
Herbs/Seedlings	*Onoclea sensibilis* (sensitive fern)	85.5/88.5	97	X	FACW
	Carex sp.(unknown sedge)	3/88.5	3		---

HYDROPHYTES

OBL	FACW	FAC	*OTHER
0	1	0	0

NON-HYDROPHYTES

FAC-	FACU	UPL
0	0	0

Hydrophytes Subtotal (A): 1

Non-hydrophytes Subtotal (B): 0

Percent Hydrophytes (100A/A+B): 100%

HYDROLOGY

☐ RECORDED DATA

Stream, lake or tidal gage Identifications:
Aerial photography Identifications:
Other Identifications:

☑ NO RECORDED DATA

☐ OBSERVATIONS:

Depth to Free Water: 14 inches
Depth to Saturation (including capillary fringe): < 12 inches
Altered Hydrology (explain): None observed

☐ Inundated ☑ Saturated within Upper 12" ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☑ Drainage Patterns

☐ OTHER (explain):

Project Title: Calais LNG | **MP:** 14.31 | **Transect:** H11 | **Plot:** Wetland

SOIL Sketch landscape position of this plot. Indicate relative position of other plot(s) and the wetland flag if not on plan.

Wetland Plot Center ←15 feet → Wetland Boundary ←15 feet → Upland Plot Center

Submission of photo of plot is encouraged.

DEPTH	HORIZON	MATRIX COLOR	REDOXIMORPHIC FEATURES (color, abundance, size, contrast)	COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root distribution, soil water, etc)
0-12	A	10YR 3/1	----------	Silt loam, 10% fine roots
12-20	B	2.5Y 6/1	Oxidized rhizospheres	Silt loam, <5% fine roots, water at 14 inches

HYDRIC SOIL INDICATOR(S): VII

REFERENCE(S):
New England Hydric Soils Technical Committee. 2004. 3rd ed., *Field Indicators for Identifying Hydric Soils in New England.* New England Interstate Water Pollution Control Commission, Lowell, MA.

OPTIONAL SOIL DATA:

Taxonomic subgroup:

Soil drainage class:

REFERENCE(S):

CONCLUSIONS

	YES	NO
Hydrophytic vegetation met?	☐	☐
Hydric soils criterion met?	☐	☐
Wetland hydrology met?	☐	☐
Is this data point in a wetland?	☐	☐

REMARKS:
***Wetland is narrow therefore vegetation in adjacent uplands has been excluded.

PROJECT TITLE: Calais LNG **MP:** 14.31 **TRANSECT**: H11 **PLOT**: Upland

EVALUATOR(S): A.S., M.P.L **DATE:** August 1, 2008

VEGETATION Stratum	Species	Dominance Ratio	Percent Dominance	DOM	NWI Status
Herbs/Seedlings	*Abies balsamea* (balsam fir)	10.5/19.5	54	X	FAC
	Osmunda claytoniana (interrupted fern)	3/19.5	15		---
	Pteridium aquilinum (bracken fern)	3/19.5	15		---
	Aralia nudicaulis (wild sarsaparilla)	3/19.5	15		---
Shrubs	*Abies balsamea* (balsam fir)	10.5/13.5	78	X	FAC
	Tsuga canadensis (eastern hemlock)	3/13.5	22	X	FACU
Sapling	*Abies balsamea* (balsam fir)	10.5/10.5	100	X	FAC
Trees	*Tsuga canadensis* (eastern hemlock)	1118.3/1489.6	75	X	FACU
	Abies balsamea (balsam fir)	258.5/1489.6	17		---
	Acer rubrum (red maple)	113/1489.6	8		---

HYDROPHYTES				NON-HYDROPHYTES		
0	0	3	0	0	2	0
OBL	FACW	FAC	*OTHER	FAC-	FACU	UPL

Hydrophytes Subtotal (A): 3

Non-hydrophytes Subtotal (B): 2

Percent Hydrophytes (100A/A+B): 60%

HYDROLOGY

☐ RECORDED DATA

Stream, lake or tidal gage Identifications:
Aerial photography Identifications:
Other Identifications:

☑ NO RECORDED DATA

☐ OBSERVATIONS:

Depth to Free Water: None observed
Depth to Saturation (including capillary fringe): None observed
Altered Hydrology (explain): None observed

☐ Inundated ☐ Saturated within Upper 12" ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns

☐ OTHER (explain):

Project Title: Calais LNG | **MP:** 14.31 | **Transect:** H11 | **Plot:** Upland

SOIL Sketch landscape position of this plot. Indicate relative position of other plot(s) and the wetland flag if not on plan.

Wetland Plot Center ←15 feet → Wetland Boundary ←15 feet → Upland Plot Center

Submission of photo of plot is encouraged.

DEPTH	HORIZON	MATRIX COLOR	REDOXIMORPHIC FEATURES (color, abundance, size, contrast)	COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root distribution, soil water, etc)
2-0	O	----------	----------	----------
0-2	A	10YR 3/2	None	Silt loam, 5% coarse roots, 10% fine roots
2-16	Bs	10YR 5/4	None	Fine sandy loam, 5% fine roots, 3% coarse particles

HYDRIC SOIL INDICATOR(S): Non-hydric

REFERENCE(S):
New England Hydric Soils Technical Committee. 2004. 3rd ed., *Field Indicators for Identifying Hydric Soils in New England.* New England Interstate Water Pollution Control Commission, Lowell, MA.

OPTIONAL SOIL DATA:

Taxonomic subgroup:

Soil drainage class:

REFERENCE(S):

CONCLUSIONS

	YES	NO	REMARKS:
Hydrophytic vegetation met?	☑	☐	
Hydric soils criterion met?	☐	☑	
Wetland hydrology met?	☐	☑	
Is this data point in a wetland?	☐	☑	

PROJECT TITLE: Calais LNG **MP:** 15.34 **TRANSECT**: G10 **PLOT**: Wetland

EVALUATOR(S): L. L. **DATE:** July 30, 2008

VEGETATION Stratum	Species	Dominance Ratio	Percent Dominance	DOM	NWI Status
Herbs/Seedlings	*Cornus canadensis* (bunchberry)	38/89.5	42%	X	FAC-
	Calamagrostis canadensis (bluejoint)	38/89.5	42%	X	FACW+
	Equisetum sylvaticum (wood horsetail)	10.5/89.5	12%		---
	Fragaria virginiana (virginia strawberry)	3/89.5	3%		---
	**No Other Layers – Power line Clearing				

HYDROPHYTES				NON-HYDROPHYTES		
0	1	0	0	1	0	0
OBL	FACW	FAC	*OTHER	FAC-	FACU	UPL

Hydrophytes Subtotal (A): 1

Non-hydrophytes Subtotal (B): 1

Percent Hydrophytes (100A/A+B): 50%

HYDROLOGY

☐ RECORDED DATA

Stream, lake or tidal gage Identifications:
Aerial photography Identifications:
Other Identifications:

☑ NO RECORDED DATA

☑ OBSERVATIONS:

Depth to Free Water: 9 inches
Depth to Saturation (including capillary fringe): 0 inches
Altered Hydrology (explain): None observed

☐ Inundated ☑ Saturated within Upper 12" ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns

☐ OTHER (explain):

Project Title: Calais LNG | **MP:** 15.34 | **Transect:** G10 | **Plot:** Wetland

SOIL Sketch landscape position of this plot. Indicate relative position of other plot(s) and the wetland flag if not on plan.

Wetland Plot Center ←12 feet → Wetland Boundary ←15 feet → Upland Plot Center

Submission of photo of plot is encouraged.

DEPTH	HORIZON	MATRIX COLOR	REDOXIMORPHIC FEATURES (color, abundance, size, contrast)	COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root distribution, soil water, etc)
+4	Oi			Sphagnum
0-4	A	2.5Y 2.5/1	None	Silt loam with some charcoal
4-12	Bg	2.5Y 5/2	10YR 4/6, c2d 5YR 5/1, c2d	Silty clay loam

HYDRIC SOIL INDICATOR(S): VI

REFERENCE(S):
New England Hydric Soils Technical Committee. 2004. 3rd ed., *Field Indicators for Identifying Hydric Soils in New England.* New England Interstate Water Pollution Control Commission, Lowell, MA.

OPTIONAL SOIL DATA:

Taxonomic subgroup:

Soil drainage class:

REFERENCE(S):

CONCLUSIONS

	YES	NO
Hydrophytic vegetation met?	☑	☐
Hydric soils criterion met?	☑	☐
Wetland hydrology met?	☑	☐
Is this data point in a wetland?	☑	☐

REMARKS:
Power line – Altered Vegetation
Relied on Soils

PROJECT TITLE: Calais LNG **MP:** 15.34 **TRANSECT**: G10 **PLOT**: Upland

EVALUATOR(S): L.L. **DATE:** July 30, 2008

VEGETATION Stratum	Species	Dominance Ratio	Percent Dominance	DOM	NWI Status
Herbs/Seedlings	*Cornus canadensis* (bunchberry)	63/110	57%	X	FAC-
	Calamagrostis canadensis (bluejoint)	20.5/110	19%		---
	Abies balsamea (balsam fir)	20.5/110	19%		---
	Larix laricina (American larch)	3/110	3%		---
	Spiraea alba var. latifolia (eastern meadowsweet)	3/110	3%		---

HYDROPHYTES				NON-HYDROPHYTES		
0	0	0	0	1	0	0
OBL	FACW	FAC	*OTHER	FAC-	FACU	UPL

Hydrophytes Subtotal (A): 0

Non-hydrophytes Subtotal (B): 1

Percent Hydrophytes (100A/A+B): 0%

HYDROLOGY

☐ RECORDED DATA

Stream, lake or tidal gage Identifications:
Aerial photography Identifications:
Other Identifications:

☑ NO RECORDED DATA

☑ OBSERVATIONS:

Depth to Free Water: > 12 inches
Depth to Saturation (including capillary fringe): > 12 inches
Altered Hydrology (explain): None observed

☐ Inundated ☐ Saturated within Upper 12" ☐ Water Marks ☐ Drift Lines ☑ Sediment Deposits ☑ Drainage Patterns

☐ OTHER (explain):

Project Title: Calais LNG | **MP:** 15.34 | **Transect:** G10 | **Plot:** Upland

SOIL Sketch landscape position of this plot. Indicate relative position of other plot(s) and the wetland flag if not on plan.

Wetland Plot Center ←12 feet → Wetland Boundary ←15 feet → Upland Plot Center

Submission of photo of plot is encouraged.

DEPTH	HORIZON	MATRIX COLOR	REDOXIMORPHIC FEATURES (color, abundance, size, contrast)	COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root distribution, soil water, etc)
0 – 3	A	2.5Y 4/3	None	Silt loam
3-7	BW1	2.5Y 5/3	None	Silt loam
7-12	BW2	5Y 5/3	5YR 5/2, c2f 2.5YR 5/4, c2d	Silt loam Seasonal high water table at 7 inches

HYDRIC SOIL INDICATOR(S): Non-hydric

REFERENCE(S):
New England Hydric Soils Technical Committee. 2004. 3rd ed., *Field Indicators for Identifying Hydric Soils in New England.* New England Interstate Water Pollution Control Commission, Lowell, MA.

OPTIONAL SOIL DATA:

Taxonomic subgroup:

Soil drainage class:

REFERENCE(S):

CONCLUSIONS

	YES	NO
Hydrophytic vegetation met?	☑	☐
Hydric soils criterion met?	☐	☑
Wetland hydrology met?	☐	☑
Is this data point in a wetland?	☐	☑

REMARKS:
Altered Vegetation – Relied on Soils

Pit & Mound Microtopography
Mounds > Pits

Power line clearing

PROJECT TITLE: Calais LNG **MP:** 16.40 **TRANSECT**: G18 **PLOT**: Wetland

EVALUATOR(S): L. L. **DATE:** July 30, 2008

VEGETATION Stratum	Species	Dominance Ratio	Percent Dominance	DOM	NWI Status
Herbs/Seedlings	*Osmunda claytoniana* (interrupted fern)	38/41	93	X	FAC
	Aralia nudicaulis (sarsaparilla)	3/41	7		---
Shrubs	*Alunus incana ssp. rugosa* (speckled alder)	38/58.5	65	X	FACW+
	*Abies balsamea (*balsam fir)	20.5/58.5	35	X	FAC
Saplings	*Abies balsamea* (balsam fir)	3/3	100	X	FAC
Trees	*Thuja occidentalis* (northern white cedar)	153.9/279.5	55	X	FACW
	Abies balsamea (balsam fir)	125.6/279.5	45	X	FAC

HYDROPHYTES

0	2	4	0
OBL	FACW	FAC	*OTHER

NON-HYDROPHYTES

0	0	0
FAC-	FACU	UPL

Hydrophytes Subtotal (A): 6

Non-hydrophytes Subtotal (B): 0

Percent Hydrophytes (100A/A+B): 100%

HYDROLOGY

☐ RECORDED DATA

Stream, lake or tidal gage Identifications:
Aerial photography Identifications:
Other Identifications:

☑ NO RECORDED DATA

☑ OBSERVATIONS:

Depth to Free Water: < 12 inches
Depth to Saturation (including capillary fringe): < 12 inches
Altered Hydrology (explain): Logged area

☐ Inundated ☑ Saturated within Upper 12" ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns

☑ OTHER (explain):

Redoximorphic features to the soil surface

Project Title: Calais LNG | **MP:** 16.40 | **Transect:** G18 | **Plot:** Wetland

SOIL Sketch landscape position of this plot. Indicate relative position of other plot(s) and the wetland flag if not on plan.

Wetland Plot Center ←12 feet → Wetland Boundary ←15 feet → Upland Plot Center

Submission of photo of plot is encouraged.

DEPTH	HORIZON	MATRIX COLOR	REDOXIMORPHIC FEATURES (color, abundance, size, contrast)	COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root distribution, soil water, etc)
+3	Oe	10YR 2/1	---------	Hemic
0-10+	Bg	5YR 5/2	5YR 5/1, c2d	Fine gravelly silt loam

HYDRIC SOIL INDICATOR(S): VI

REFERENCE(S):
New England Hydric Soils Technical Committee. 2004. 3rd ed., *Field Indicators for Identifying Hydric Soils in New England.* New England Interstate Water Pollution Control Commission, Lowell, MA.

OPTIONAL SOIL DATA:

Taxonomic subgroup:

Soil drainage class:

REFERENCE(S):

CONCLUSIONS

	YES	NO
Hydrophytic vegetation met?	☑	☐
Hydric soils criterion met?	☑	☐
Wetland hydrology met?	☑	☐
Is this data point in a wetland?	☑	☐

REMARKS:
Adjacent to power line,
Partially logged ~ 15 yrs ago (estimate)

PROJECT TITLE: Calais LNG **MP:** 16.40 **TRANSECT**: G18 **PLOT**: Upland

EVALUATOR(S): L. L. **DATE:** July 30, 2008

VEGETATION Stratum	Species	Dominance Ratio	Percent Dominance	DOM	NWI Status
Herbs/Seedlings	*Acer spicatum* (mountain maple)	3/3	100	X	FACU-
Shrubs	*Abies balsamea* (balsam fir)	38/70	54	X	FAC
	*Acer rubrum (*red maple) – stump sprouts	20.5/70	29	X	FAC
	Corylus cornuta (beaked hazelnut)	10.5/70	15		---
Saplings	*Abies balsamea* (balsam fir)	20.5/20.5	100	X	FAC
Trees	*Abies balsamea* (balsam fir)	202.4/202.4	100	X	FAC

HYDROPHYTES				NON-HYDROPHYTES		
0	0	4	0	0	1	0
OBL	FACW	FAC	*OTHER	FAC-	FACU	UPL

Hydrophytes Subtotal (A): 4

Non-hydrophytes Subtotal (B): 1

Percent Hydrophytes (100A/A+B): 80%

HYDROLOGY

☐ RECORDED DATA

Stream, lake or tidal gage Identifications:
Aerial photography Identifications:
Other Identifications:

☑ NO RECORDED DATA

☑ OBSERVATIONS:

Depth to Free Water: > 15 inches
Depth to Saturation (including capillary fringe): > 15 inches
Altered Hydrology (explain): None

☐ Inundated ☐ Saturated within Upper 12" ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns

☐ OTHER (explain):

Project Title: Calais LNG | **MP:** 16.40 | **Transect:** G18 | **Plot:** Upland

SOIL Sketch landscape position of this plot. Indicate relative position of other plot(s) and the wetland flag if not on plan.

Wetland Plot Center ←12 feet → Wetland Boundary ←15 feet → Upland Plot Center

Submission of photo of plot is encouraged.

DEPTH	HORIZON	MATRIX COLOR	REDOXIMORPHIC FEATURES (color, abundance, size, contrast)	COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root distribution, soil water, etc)
0-3	A	10YR 2/1	---------	Loam
3-8	Bw	5YR 5/3	None	Gravelly loam
8-15	Bw2	5YR 5/3	5YR 5/2, c2f	Gravelly loam

HYDRIC SOIL INDICATOR(S): Non-Hydric

REFERENCE(S):
New England Hydric Soils Technical Committee. 2004. 3rd ed., *Field Indicators for Identifying Hydric Soils in New England.* New England Interstate Water Pollution Control Commission, Lowell, MA.

OPTIONAL SOIL DATA:

Taxonomic subgroup:

Soil drainage class:

REFERENCE(S):

CONCLUSIONS

	YES	NO
Hydrophytic vegetation met?	☑	☐
Hydric soils criterion met?	☐	☑
Wetland hydrology met?	☐	☑
Is this data point in a wetland?	☐	☑

REMARKS:
Logged ~15 yrs ago (estimate),
Adjacent to Powerline

PROJECT TITLE: Calais LNG **MP:** 17.76 **TRANSECT**: G22 **PLOT**: Wetland

EVALUATOR(S): L. L. **DATE:** July 30, 2008

VEGETATION Stratum	Species	Dominance Ratio	Percent Dominance	DOM	NWI Status
Herbs/Seedlings	*Calamagrostis canadensis* (bluejoint)	63/97	68	X	FACW+
	Glyceria canadensis (rattlesnake grass)	20.5/97	21	X	OBL
	Onoclea sensibilis (sensitive fern)	10.5/97	11		---
	Scirpus cyperinus (woolgrass)	3/97	3		---
Shrubs	*Betula populifolia* (grey birch)	38/85	45	X	FAC
	*Abies balsamea (*balsam fir)	3/85	4		---
	Betula alba (white birch)	3/85	4		---
	Alunus incana ssp. rugosa (speckled alder)	38/85	45	X	FACW+
	Spiraea alba var. latifolia (meadowsweet)	3/85	4		---
Saplings	*Acer rubrum* (red maple)	3	100	X	FAC
Trees	*Acer rubrum* (red maple)	89.4/89.4	100	X	FAC

HYDROPHYTES				NON-HYDROPHYTES		
1	2	2	0	0	0	0
OBL	FACW	FAC	*OTHER	FAC-	FACU	UPL

Hydrophytes Subtotal (A): 3

Non-hydrophytes Subtotal (B): 0

Percent Hydrophytes (100A/A+B): 100%

HYDROLOGY

☐ RECORDED DATA

Stream, lake or tidal gage Identifications:
Aerial photography Identifications:
Other Identifications:

☑ NO RECORDED DATA

☑ OBSERVATIONS:

Depth to Free Water: +2 inches
Depth to Saturation (including capillary fringe): N/A (inundated)
Altered Hydrology (explain): None observed

☑ Inundated ☐ Saturated within Upper 12" ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns

☐ OTHER (explain):

Project Title: Calais LNG | **MP:** 17.76 | **Transect:** G22 | **Plot:** Wetland

SOIL Sketch landscape position of this plot. Indicate relative position of other plot(s) and the wetland flag if not on plan.

Wetland Plot Center ←8 feet → Wetland Boundary ←6 feet → Upland Plot Center

Submission of photo of plot is encouraged.

DEPTH	HORIZON	MATRIX COLOR	REDOXIMORPHIC FEATURES (color, abundance, size, contrast)	COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root distribution, soil water, etc)
0-3	A	2.5Y 3/2	None	Silt loam
3-8+	Bg	5YR 5/1	5YR 5/4 Along Root Channels	Silt clay loam

HYDRIC SOIL INDICATOR(S): VI

REFERENCE(S):
New England Hydric Soils Technical Committee. 2004. 3rd ed., *Field Indicators for Identifying Hydric Soils in New England.* New England Interstate Water Pollution Control Commission, Lowell, MA.

OPTIONAL SOIL DATA:

REFERENCE(S):

Taxonomic subgroup:

Soil drainage class:

CONCLUSIONS

	YES	NO	REMARKS:
Hydrophytic vegetation met?	☑	☐	
Hydric soils criterion met?	☑	☐	
Wetland hydrology met?	☑	☐	
Is this data point in a wetland?	☑	☐	

PROJECT TITLE: Calais LNG **MP:** 17.76 **TRANSECT**: G22 **PLOT**: Upland

EVALUATOR(S): L.L. **DATE:** July 30, 2008

VEGETATION Stratum	Species	Dominance Ratio	Percent Dominance	DOM	NWI Status
Herbs/Seedlings	*Gymnocarpium dryopteris* (oak fern)	10.5/34.5	30	X	UPL
	Aralia nudicaulis (wild sarsaparilla)	10.5/34.5	30	X	FACU
	Corylus cornuta (beaked hazel-nut)	10.5/34.5	30	X	FACU-
	*Abies balsamea (*balsam fir)	3/34.5	9		---
Shrubs	*Corylus cornuta* (beaked hazel-nut)	38/44	86	X	FACU-
	Picea glauca (white spruce)	3/44	2		---
	Abies balsamea (balsam fir)	3/44	2		---
Saplings	*Acer rubrum* (red maple)	38/41	93	X	FAC
	Populus tremuloides (quaking aspen)	3/41	7		---
Trees	*Abies balsamea (*balsam fir)	241/511.1	47	X	FAC
	Acer rubrum (red maple)	172/511.1	34	X	FAC
	Populus tremuloides (quaking aspen)	50.2/511.1	10		---
	Betula alleghaniensis (yellow birch)	28.3/511.1	6		---
	Betula populifolia (gray birch)	19.6/511.1	4		---

HYDROPHYTES				NON-HYDROPHYTES		
0	0	3	0	0	3	1
OBL	FACW	FAC	*OTHER	FAC-	FACU	UPL

Hydrophytes Subtotal (A): 3

Non-hydrophytes Subtotal (B): 4

Percent Hydrophytes (100A/A+B): 43%

HYDROLOGY

☐ RECORDED DATA

Stream, lake or tidal gage Identifications:
Aerial photography Identifications:
Other Identifications:

☑ NO RECORDED DATA

☑ OBSERVATIONS:

Depth to Free Water: > 15 inches
Depth to Saturation (including capillary fringe): Not observed
Altered Hydrology (explain): N/A

☐ Inundated ☐ Saturated within Upper 12" ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns

☐ OTHER (explain):

Project Title: Calais LNG | **MP:** 17.76 | **Transect:** G22 | **Plot:** Upland

SOIL Sketch landscape position of this plot. Indicate relative position of other plot(s) and the wetland flag if not on plan.

Wetland Plot Center ←8 feet → Wetland Boundary ←6 feet → Upland Plot Center

Submission of photo of plot is encouraged.

DEPTH	HORIZON	MATRIX COLOR	REDOXIMORPHIC FEATURES (color, abundance, size, contrast)	COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root distribution, soil water, etc)
0-10	Ap	10YR 4/2	None	Very gravelly loam
10-15	Bw	2.5YR 5/4	None	Gravelly loam

HYDRIC SOIL INDICATOR(S): Non-hydric

REFERENCE(S):
New England Hydric Soils Technical Committee. 2004. 3rd ed., *Field Indicators for Identifying Hydric Soils in New England.* New England Interstate Water Pollution Control Commission, Lowell, MA.

OPTIONAL SOIL DATA:

REFERENCE(S):

Taxonomic subgroup:

Soil drainage class:

CONCLUSIONS

	YES	NO	REMARKS:
Hydrophytic vegetation met?	☐	☑	
Hydric soils criterion met?	☐	☑	
Wetland hydrology met?	☐	☑	
Is this data point in a wetland?	☐	☑	

PROJECT TITLE: Calais LNG **MP:** 18.26 **TRANSECT**: G28 **PLOT**: Wetland

EVALUATOR(S): L. L. **DATE:** July 29, 2008

VEGETATION Stratum	Species	Dominance Ratio	Percent Dominance	DOM	NWI Status
Herbs/Seedlings	*Calamagrostis canadensis* (bluejoint)	68/125.5	54	X	FACW+
	Carex scoparia (broom sedge)	38/125.5	30	X	FACW
	*Solidago patula (*rough-leaf golden-rod)	10.5/125.5	8		---
	Equisetum sylvaticum (woodland horsetail)	3/125.5	2		---
	Scirpus georgianus (dark green bullrush)	3/125.5	2		---
	Osmunda regalis (royal fern)	3/125.5	2		---
Shrubs	*Spiraea alba var. latifolia (*eastern meadowsweet)	38/54.5	70	X	FAC+
	Larix laricina (american larch)	10.5/54.5	19		---
	Betula populifolia (gray birch)	3/54.5	6		---
	Picea glauca (white spruce)	3/54.5	6		---

HYDROPHYTES

0	2	1	0
OBL	FACW	FAC	*OTHER

NON-HYDROPHYTES

0	0	0
FAC-	FACU	UPL

Hydrophytes Subtotal (A): 3

Non-hydrophytes Subtotal (B): 0

Percent Hydrophytes (100A/A+B): 100%

HYDROLOGY

☐ RECORDED DATA

Stream, lake or tidal gage Identifications:
Aerial photography Identifications:
Other Identifications:

☑ NO RECORDED DATA

☑ OBSERVATIONS:

Depth to Free Water: 0 inches (at surface)
Depth to Saturation (including capillary fringe): N/A
Altered Hydrology (explain): None observed

☐ Inundated ☑ Saturated within Upper 12" ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns

☑ OTHER (explain):

Oxidized rhizospheres to soil surface

Project Title: Calais LNG | **MP:** 18.26 | **Transect:** G28 | **Plot:** Wetland

SOIL Sketch landscape position of this plot. Indicate relative position of other plot(s) and the wetland flag if not on plan.

Wetland Plot Center ←15 feet → Wetland Boundary ←12 feet → Upland Plot Center

Submission of photo of plot is encouraged.

DEPTH	HORIZON	MATRIX COLOR	REDOXIMORPHIC FEATURES (color, abundance, size, contrast)	COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root distribution, soil water, etc)
0-2	A	2.5Y 3/2	Oxidized rhizospheres	Silt loam
2-5	Bg	5Y 4/1	5YR 5/1, c2f 10YR 4/6, mzp	Gravelly silt loam
5-15	Bg	5Y 5/3	5YR 5/1, c2f 10YR 4/6, mzp	Silt loam

HYDRIC SOIL INDICATOR(S):VI

REFERENCE(S):
New England Hydric Soils Technical Committee. 2004. 3rd ed., *Field Indicators for Identifying Hydric Soils in New England.* New England Interstate Water Pollution Control Commission, Lowell, MA.

OPTIONAL SOIL DATA:

Taxonomic subgroup:

Soil drainage class:

REFERENCE(S):

CONCLUSIONS

	YES	NO
Hydrophytic vegetation met?	☑	☐
Hydric soils criterion met?	☑	☐
Wetland hydrology met?	☑	☐
Is this data point in a wetland?	☑	☐

REMARKS:
Note on powerline right-of-way

PROJECT TITLE: Calais LNG **MP:** 18.25 **TRANSECT**: G28 **PLOT**: Upland

EVALUATOR(S): L. L., L.N. **DATE:** July 29, 2008

VEGETATION

Stratum	Species	Dominance Ratio	Percent Dominance	DOM	NWI Status
Herbs/Seedlings	*Calamagrostis canadensis* (bluejoint)	38/109.5	35	X	FACW+
	Vaccinium angustifolium (lowbush blueberry)	20.5/109.5	19	X	FACU-
	Abies balsamea (balsam fir)	10.5/109.5	10		---
	Cornus canadensis (canada bunchberry)	10.5/109.5	10		---
	Potentilla simplex (common cinquefoil)	10.5/109.5	10		---
	Gaultheria procumbens (wintergreen))	10.5/109.5	10		---
	Hieracium pretense (field hawkweed)	3/109.5	3		---
	Solidago sp. (grass-leaf goldenrod)	3/109.5	3		---
	*Solidago patula (*rough-leaf golden-rod)	3/109.5	3		---
Shrubs	*Larix laricina* (American larch)	38/79	48	X	FACW
	*Spiraea alba var. latifolia (*eastern meadowsweet)	20.5/79	26	X	FAC+
	Betula populifolia (gray birch)	20.5/79	26	X	FAC

HYDROPHYTES

0	2	2	0
OBL	FACW	FAC	*OTHER

NON-HYDROPHYTES

0	1	0
FAC-	FACU	UPL

Hydrophytes Subtotal (A): 4

Non-hydrophytes Subtotal (B): 1

Percent Hydrophytes (100A/A+B): 80%

HYDROLOGY

☐ RECORDED DATA

Stream, lake or tidal gage Identifications:
Aerial photography Identifications:
Other Identifications:

☑ NO RECORDED DATA

☐ OBSERVATIONS:

Depth to Free Water: Not observed
Depth to Saturation (including capillary fringe): Not observed
Altered Hydrology (explain): N/A

☐ Inundated ☐ Saturated within Upper 12" ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns

☐ OTHER (explain):

Project Title: Calais LNG | **MP:** 18.25 | **Transect:** G28 | **Plot:** Upland

SOIL Sketch landscape position of this plot. Indicate relative position of other plot(s) and the wetland flag if not on plan.

Wetland Plot Center ←15 feet → Wetland Boundary ←15 feet → Upland Plot Center

Submission of photo of plot is encouraged.

DEPTH	HORIZON	MATRIX COLOR	REDOXIMORPHIC FEATURES (color, abundance, size, contrast)	COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root distribution, soil water, etc)
0-5	A	10YR 3/2		Fine sandy loam
5-12	Bw	10YR 5/4	2.5YR 5/4, c2d common 10YR 4/6, c2d	Silt loam
12+	Cd	2.5Y 5/4	2.5YR 6/3 conc: 10YR 4/6, c2d	Silt loan; firm; platy

HYDRIC SOIL INDICATOR(S): Non-Hydric

REFERENCE(S):
New England Hydric Soils Technical Committee. 2004. 3rd ed., *Field Indicators for Identifying Hydric Soils in New England.* New England Interstate Water Pollution Control Commission, Lowell, MA.

OPTIONAL SOIL DATA:

Taxonomic subgroup:

Soil drainage class:

REFERENCE(S):

CONCLUSIONS

	YES	NO
Hydrophytic vegetation met?	☐	☐
Hydric soils criterion met?	☐	☐
Wetland hydrology met?	☐	☐
Is this data point in a wetland?	☐	☐

REMARKS:
In power line (ATV use).

PROJECT TITLE: Calais LNG **MP:** 19.87 **TRANSECT**: G34 **PLOT**: Wetland

EVALUATOR(S): L. L. **DATE:** July 29, 2008

VEGETATION Stratum	Species	Dominance Ratio	Percent Dominance	DOM	NWI Status
Herbs/Seedlings	*Glyceria striata* (fowl manna grass)	38/79	48	X	OBL
	Chloris crinite (false-rhodesgrass)	20.5/79	26	X	NI
	Calamagrostis canadensis (bluejoint)	20.5/79	26	X	FACW+
Shrubs	*Abies balsamea* (balsam fir)	38/58.5	65	X	FAC
	Alunus incana ssp. rugosa (speckled alder)	20.5/58.5	35	X	FACW+
Saplings	*Acer rubrum* (red maple)	10.5/21	50	X	FAC
	Abies balsamea (balsam fir)	10.5/21	50	X	FAC
Trees	*Abies balsamea* (balsam fir)	160.2/249.6	64	X	FAC
	Acer rubrum (red maple)	89.4/249.6	36	X	FAC

HYDROPHYTES				NON-HYDROPHYTES		
1	2	5	1	0	0	0
OBL	FACW	FAC	*OTHER	FAC-	FACU	UPL

Hydrophytes Subtotal (A): 9

Non-hydrophytes Subtotal (B): 0

Percent Hydrophytes (100A/A+B): 100%

HYDROLOGY

☐ RECORDED DATA

Stream, lake or tidal gage Identifications:
Aerial photography Identifications:
Other Identifications:

☑ NO RECORDED DATA

☑ OBSERVATIONS:

Depth to Free Water: Surface
Depth to Saturation (including capillary fringe): N/A
Altered Hydrology (explain): None observed

☑ Inundated ☑ Saturated within Upper 12" ☑ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☑ Drainage Patterns

☐ OTHER (explain):

Project Title: Calais LNG | **MP:** 19.87 | **Transect:** G34 | **Plot:** Wetland

SOIL Sketch landscape position of this plot. Indicate relative position of other plot(s) and the wetland flag if not on plan.

Wetland Plot Center ←15 feet → Wetland Boundary ←15 feet → Upland Plot Center

Submission of photo of plot is encouraged.

DEPTH	HORIZON	MATRIX COLOR	REDOXIMORPHIC FEATURES (color, abundance, size, contrast)	COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root distribution, soil water, etc)
+4 – 0	Oa	10YR 3/1		Sapric
0 - 8	Bg	2.5YR 6/2	2.5YR 6/1, c2d	Loam

HYDRIC SOIL INDICATOR(S): V

REFERENCE(S):
New England Hydric Soils Technical Committee. 2004. 3rd ed., *Field Indicators for Identifying Hydric Soils in New England.* New England Interstate Water Pollution Control Commission, Lowell, MA.

OPTIONAL SOIL DATA:

Taxonomic subgroup:

Soil drainage class:

REFERENCE(S):

CONCLUSIONS

	YES	NO
Hydrophytic vegetation met?	☑	☐
Hydric soils criterion met?	☑	☐
Wetland hydrology met?	☑	☐
Is this data point in a wetland?	☑	☐

REMARKS:
Area has been recently logged

PROJECT TITLE: Calais LNG **MP:** 19.88 **TRANSECT**: G34 **PLOT**: Upland

EVALUATOR(S): L. L., L.N. **DATE:** July 29, 2008

VEGETATION Stratum	Species	Dominance Ratio	Percent Dominance	DOM	NWI Status
Herbs/Seedlings	*Hieracium pratense* (field hawkweed)	63/86.5	73	X	UPL
	Aralia nudicaulis (wild sarsaparilla)	20.5/86.5	24	X	FACU
	Alunus incana ssp. rugosa (speckled alder)	3/86.5	3		---
Shrubs	*Populus tremuloides* (quaking aspen)	20.5/26.5	77	X	FACU
	*Betula alba (*white birch)	3/26.5	11		---
	Alunus incana ssp. rugosa (speckled alder)	3/26.5	11		---
Saplings	*Betula alba (*white birch)	3/3	100	X	FAC+
Trees	*Unknown tree*	38.5/145.2	27	X	NI
	Picea rubens (red spruce)	28.3/145.2	19		---
	Acer rubrum (red maple)	19.6/145.2	13		---
	Populus tremuloides (quaking aspen)	19.6/145.2	13		---
	Abies balsamea (balsam fir)	19.6/145.2	13		---
	Tsuga canadensis (eastern hemlock)	19.6/145.2	13		---

HYDROPHYTES				NON-HYDROPHYTES		
0	0	0	1	0	2	1
OBL	FACW	FAC	*OTHER	FAC-	FACU	UPL

Hydrophytes Subtotal (A): 1

Non-hydrophytes Subtotal (B): 3

Percent Hydrophytes (100A/A+B): 25%

HYDROLOGY

☐ RECORDED DATA

Stream, lake or tidal gage Identifications:
Aerial photography Identifications:
Other Identifications:

☑ NO RECORDED DATA

☐ OBSERVATIONS:

Depth to Free Water: None observed
Depth to Saturation (including capillary fringe): None observed
Altered Hydrology (explain): None observed

☐ Inundated ☐ Saturated within Upper 12" ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns

☐ OTHER (explain):

Project Title: Calais LNG | **MP:** 19.88 | **Transect:** G34 | **Plot:** Upland

SOIL Sketch landscape position of this plot. Indicate relative position of other plot(s) and the wetland flag if not on plan.

Wetland Plot Center ←15 feet → Wetland Boundary ←15 feet → Upland Plot Center

Submission of photo of plot is encouraged.

DEPTH	HORIZON	MATRIX COLOR	REDOXIMORPHIC FEATURES (color, abundance, size, contrast)	COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root distribution, soil water, etc)
0-5	Ap	10YR 3/2		Very gravelly sandy loam
5-10	B	2.5Y 5/3		Extremely gravelly sandy loam

HYDRIC SOIL INDICATOR(S):Non-hydric

REFERENCE(S):
New England Hydric Soils Technical Committee. 2004. 3rd ed., *Field Indicators for Identifying Hydric Soils in New England.* New England Interstate Water Pollution Control Commission, Lowell, MA.

OPTIONAL SOIL DATA:

Taxonomic subgroup:

Soil drainage class:

REFERENCE(S):

CONCLUSIONS

	YES	NO
Hydrophytic vegetation met?	☐	☑
Hydric soils criterion met?	☐	☑
Wetland hydrology met?	☐	☑
Is this data point in a wetland?	☐	☑

REMARKS:
Possible Old Fill

PROJECT TITLE: Calais LNG **MP:** 0.5 **TRANSECT**: W-9D **PLOT**: Wetland

EVALUATOR(S): W.S.M. **DATE:** May 2, 2009

VEGETATION Stratum	Species	Dominance Ratio	Percent Dominance	DOM	NWI Status
Moss	*Sphagnum sp.* (Sphagnum moss)	98/98	100	X	OBL
Herbs/Seedlings	*Carex trisperma* (three-seeded sedge)	85/116.5	73	X	OBL
	Vaccinium oxycoccos (small cranberry)	20.5/116.5	18		---
	Cornus Canadensis (bunchberry)	10.5/116.5	9		---
Shrubs	*Abies balsamea* (balsam fir)	38/79	48	X	FAC
	Kalmia angustifolia (sheep laurel)	20.5/79	26	X	FAC
	Picea rubens (red spruce)*	20.5/79	26	X	FACU*
Sapling	*Picea rubens* (red spruce)*	38/76	50	X	FACU*
	Abies balsamea (balsam fir)	38/76	50	X	FAC
Trees	*Picea rubens* (red spruce)*	412/657	63	X	FACU*
	Abies balsamea (balsam fir)	133/657	20	X	FAC
	Thuja occidentalis (northern white cedar)	112/657	17		---

* exhibited raised root morphology

HYDROPHYTES				NON-HYDROPHYTES		
2	0	4	3	0	0	0
OBL	FACW	FAC	*OTHER	FAC-	FACU	UPL

Hydrophytes Subtotal (A): 8 Non-hydrophytes Subtotal (B): 0

Percent Hydrophytes (100A/A+B): 8/8 = 100%

HYDROLOGY

☐ RECORDED DATA

Stream, lake or tidal gage Identifications:
Aerial photography Identifications:
Other Identifications:

☑ NO RECORDED DATA

☐ OBSERVATIONS:

Depth to Free Water: 1 inch
Depth to Saturation (including capillary fringe): 0 inches – saturated at surface
Altered Hydrology (explain): None Observed

☐ Inundated ☑ Saturated within Upper 12" ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns

☐ OTHER (explain):

Project Title: Calais LNG | **MP:** 0.5 | **Transect:** W-9D | **Plot:** Wetland

SOIL Sketch landscape position of this plot. Indicate relative position of other plot(s) and the wetland flag if not on plan.

Wetland Plot Center ←30 feet → Wetland Boundary ←30 feet → Upland Plot Center

Submission of photo of plot is encouraged.

DEPTH	HORIZON	MATRIX COLOR	REDOXIMORPHIC FEATURES (color, abundance, size, contrast)	COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root distribution, soil water, etc)
0-1	A	10YR 2/1	None	Silt loam; mucky; many fine roots; saturated; *Sphagnum sp.* above
1-24+	B	5Y 6/2	10YR 5/6; medium, common, prominent	Clay loam/clay; slightly gritty; few fine roots; saturated

HYDRIC SOIL INDICATOR(S): VI – Depleted or Gleyed Matrix

REFERENCE(S):
New England Hydric Soils Technical Committee. 2004. 3rd ed., *Field Indicators for Identifying Hydric Soils in New England.* New England Interstate Water Pollution Control Commission, Lowell, MA.

OPTIONAL SOIL DATA:

Taxonomic subgroup:

Soil drainage class: Poorly drained

REFERENCE(S):

CONCLUSIONS

	YES	NO	REMARKS:
Hydrophytic vegetation met?	☑	☐	
Hydric soils criterion met?	☑	☐	
Wetland hydrology met?	☑	☐	
Is this data point in a wetland?	☑	☐	

PROJECT TITLE: Calais LNG **MP:** 0.5 **TRANSECT**: W-9D **PLOT**: Upland

EVALUATOR(S): W.S.M. **DATE:** May 2, 2009

VEGETATION Stratum	Species	Dominance Ratio	Percent Dominance	DOM	NWI Status
Mosses	*Hylocomium splendens* (splendid feather moss)	63/73.5	86	X	NI
	Polytrichum sp. (Polytrichum moss)	10.5/73.5	14		---
Herbs/Seedlings	None				
Shrubs	*Abies balsamea* (balsam fir)	10.5/10.5	100	X	FAC
Sapling	*Abies balsamea* (balsam fir)	63/63	100	X	FAC
Trees	*Abies balsamea* (balsam fir)	468/661	71	X	FAC
	Picea rubens (red spruce)	150/661	23	X	FACU
	Thuja occidentalis (northern white cedar)	43/661	7		---

HYDROPHYTES				NON-HYDROPHYTES		
0	0	3	0	0	1	0
OBL	FACW	FAC	*OTHER	FAC-	FACU	UPL

Hydrophytes Subtotal (A): 3

Non-hydrophytes Subtotal (B): 1

Percent Hydrophytes (100A/A+B): 3/4 = 75%

HYDROLOGY

☐ RECORDED DATA

Stream, lake or tidal gage Identifications:
Aerial photography Identifications:
Other Identifications:

☑ NO RECORDED DATA

☑ OBSERVATIONS:

Depth to Free Water: > 20 inches
Depth to Saturation (including capillary fringe): > 20 inches
Altered Hydrology (explain): None Observed

☐ Inundated ☐ Saturated within Upper 12" ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns

☐ OTHER (explain):

Project Title: Calais LNG | **MP:** 0.5 | **Transect:** W-9D | **Plot:** Upland

SOIL Sketch landscape position of this plot. Indicate relative position of other plot(s) and the wetland flag if not on plan.

Wetland Plot Center ←30 feet → Wetland Boundary ←30 feet → Upland Plot Center

Submission of photo of plot is encouraged.

DEPTH	HORIZON	MATRIX COLOR	REDOXIMORPHIC FEATURES (color, abundance, size, contrast)	COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root distribution, soil water, etc)
3 – 0	Oi	----------	----------	Organic material; fibric; needles, twigs, and surface roots
0 – 2	A	10YR 2/1	None	Loam; common medium roots; many fine roots; gritty – coarse sand approx. 10%
2 – 4	B1	2.5Y 4/2	None	Sandy loam; rocky/pebbly with 1-4 inch rocks; common medium roots
4 – 20	B2	10YR 4/6	None	Loamy sand; few roots; rocky

HYDRIC SOIL INDICATOR(S): Non-hydric

REFERENCE(S):
New England Hydric Soils Technical Committee. 2004. 3rd ed., *Field Indicators for Identifying Hydric Soils in New England.* New England Interstate Water Pollution Control Commission, Lowell, MA.

OPTIONAL SOIL DATA:

Taxonomic subgroup:

Soil drainage class: Poorly drained

REFERENCE(S):

CONCLUSIONS

	YES	NO	REMARKS:
Hydrophytic vegetation met?	☑	☐	
Hydric soils criterion met?	☐	☑	
Wetland hydrology met?	☐	☑	
Is this data point in a wetland?	☐	☑	

PROJECT TITLE: Calais LNG **MP:** 1.45 **TRANSECT**: W-25 **PLOT**: Wetland

EVALUATOR(S): W.S.M. **DATE:** May 1, 2009

VEGETATION Stratum	Species	Dominance Ratio	Percent Dominance	DOM	NWI Status
Herbs/Seedlings	*Maianthemum canadense* (Canada mayflower)	10/16.5	64	X	FAC-
	Abies balsamea (balsam fir)	3/16.5	18		---
	Thuja occidentalis (northern white cedar)	3/16.5	18		---
Shrubs	*Abies balsamea* (balsam fir)	10.5/10.5	100	X	FAC
Saplings	*Abies balsamea* (balsam fir)	20.5/41	50	X	FAC
	Acer rubrum (red maple)	20.5/41	50	X	FAC
Trees	*Acer rubrum* (red maple)	699/971	72	X	FAC
	Abies balsamea (balsam fir)	102/971	10		---
	Populus grandidentata (bigtooth aspen)	95/971	10		---
	Picea rubens (red spruce)	75/971	8		---

HYDROPHYTES				NON-HYDROPHYTES		
		4	0	1	0	0
OBL	FACW	FAC	*OTHER	FAC-	FACU	UPL

Hydrophytes Subtotal (A): 6

Non-hydrophytes Subtotal (B): 0

Percent Hydrophytes (100A/A+B): 4/5 = 80%

HYDROLOGY

☐ RECORDED DATA

Stream, lake or tidal gage Identifications:
Aerial photography Identifications:
Other Identifications:

☑ NO RECORDED DATA

☑ OBSERVATIONS:

Depth to Free Water: 0 inches; ponded 1 inch at pit location
Depth to Saturation (including capillary fringe): 0 inches, saturated at surface
Altered Hydrology (explain): None Observed

☑ Inundated ☑ Saturated within Upper 12" ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns

☑ OTHER (explain): Water stained leaves

Project Title: Calais LNG | **MP:** 1.45 | **Transect:** W-25 | **Plot:** Wetland

SOIL Sketch landscape position of this plot. Indicate relative position of other plot(s) and the wetland flag if not on plan.

Wetland Plot Center ←20 feet → Wetland Boundary ←25 feet → Upland Plot Center

Submission of photo of plot is encouraged.

DEPTH	HORIZON	MATRIX COLOR	REDOXIMORPHIC FEATURES (color, abundance, size, contrast)	COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root distribution, soil water, etc)
0 – 9	A	2.5Y 3/3	None	Sandy loam; common fine roots; saturated; very gritty – coarse sand
8 – 18	B	5Y 6/1	10YR 5/4 many, medium, prominant	Sandy clay loam; saturated; oxidized rhizospheres at 9 inches
> 18	Bedrock	----------	----------	Rock refusal

HYDRIC SOIL INDICATOR(S): VI – Depleted or Gleyed Matrix

REFERENCE(S):
New England Hydric Soils Technical Committee. 2004. 3rd ed., *Field Indicators for Identifying Hydric Soils in New England.* New England Interstate Water Pollution Control Commission, Lowell, MA.

OPTIONAL SOIL DATA:

Taxonomic subgroup:

Soil drainage class:

REFERENCE(S):

CONCLUSIONS

	YES	NO	REMARKS:
Hydrophytic vegetation met?	☑	☐	
Hydric soils criterion met?	☑	☐	
Wetland hydrology met?	☑	☐	
Is this data point in a wetland?	☑	☐	

PROJECT TITLE: Calais LNG **MP:** 1.45 **TRANSECT**: W-25 **PLOT**: Upland

EVALUATOR(S): W.S.M. **DATE:** May 1, 2009

VEGETATION Stratum	Species	Dominance Ratio	Percent Dominance	DOM	NWI Status
Herbs/Seedlings	*Maianthemum canadense* (Canada mayflower)	10.5/19.5	54	X	FAC-
	Cornus canadensis (bunchberry)	3/19.5	15		---
	Pyrola americana (American wintergreen)	3/19.5	15		---
	Pteridium aquilinum (bracken fern)	3/19.5	15		---
Shrubs	*Abies balsamea* (balsam fir)	10.5/21	50	X	FAC
	Acer rubrum (red maple)	10.5/21	50	X	FAC
Saplings	*Abies balsamea* (balsam fir)	63/63	100	X	FAC
Trees	*Acer rubrum* (red maple)	137/248	55	X	FAC
	Larix laricina (tamarack)	111/248	45	X	FACW

HYDROPHYTES

0	1	4	0
OBL	FACW	FAC	*OTHER

NON-HYDROPHYTES

1	0	0
FAC-	FACU	UPL

Hydrophytes Subtotal (A): 5

Non-hydrophytes Subtotal (B): 1

Percent Hydrophytes (100A/A+B): 5/6 = 83%

HYDROLOGY

☐ RECORDED DATA

Stream, lake or tidal gage Identifications:
Aerial photography Identifications:
Other Identifications:

☑ NO RECORDED DATA

☑ OBSERVATIONS:

Depth to Free Water: > 16 inches
Depth to Saturation (including capillary fringe): > 16 inches
Altered Hydrology (explain): None Observed

☐ Inundated ☐ Saturated within Upper 12" ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns

☐ OTHER (explain):

Project Title: Calais LNG | **MP:** 1.45 | **Transect:** W-25 | **Plot:** Upland

SOIL Sketch landscape position of this plot. Indicate relative position of other plot(s) and the wetland flag if not on plan.

Wetland Plot Center ←20 feet → Wetland Boundary ←25 feet → Upland Plot Center

Submission of photo of plot is encouraged.

DEPTH	HORIZON	MATRIX COLOR	REDOXIMORPHIC FEATURES (color, abundance, size, contrast)	COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root distribution, soil water, etc)
1 – 0	Oi	--------	--------	Fibric; needles, leaves and coarse woody debris
1 – 6	A	10YR 2/2	None	Loam; common fine roots; moist; gritty with approx. 10% coarse sand
6 – 16	B	10YR 4/4	None	Loamy sand; very moist; few medium roots
> 16	Bedrock			Rock refusal

HYDRIC SOIL INDICATOR(S): Non-hydric

REFERENCE(S):
New England Hydric Soils Technical Committee. 2004. 3rd ed., *Field Indicators for Identifying Hydric Soils in New England.* New England Interstate Water Pollution Control Commission, Lowell, MA.

OPTIONAL SOIL DATA:

REFERENCE(S):

Taxonomic subgroup:

Soil drainage class:

CONCLUSIONS

	YES	NO
Hydrophytic vegetation met?	☑	☐
Hydric soils criterion met?	☐	☑
Wetland hydrology met?	☐	☑
Is this data point in a wetland?	☐	☑

REMARKS:

PROJECT TITLE: Calais LNG **MP:** 2.1 **TRANSECT**: W-19 **PLOT**: Wetland

EVALUATOR(S): W.S.M. **DATE:** April 30, 2009

VEGETATION Stratum	Species	Dominance Ratio	Percent Dominance	DOM	NWI Status
Mosses	*Sphagnum sp.* (Sphagnum moss)	63/66	95	X	OBL
	Hylocomium splendens (splendid feather moss)	3/66	5		---
Herbs/Seedlings	*Carex trisperma* (three-seeded sedge)	63/66	95	X	OBL
	Coptis trifolia (gold thread)	3/66	5		---
Shrubs	*Abies balsamea* (balsam fir)	38/38	100	X	FAC
Sapling	*Abies balsamea* (balsam fir)	38/48.5	78	X	FAC
	Acer rubrum (red maple)	10.5/48.5	22	X	FAC
Trees	*Thuja occidentalis* (northern white cedar)	846/1119	76	X	FACW
	Acer rubrum (red maple)	188/1119	17		---
	Abies balsamea (balsam fir)	558.5/790.9	8		---

HYDROPHYTES				NON-HYDROPHYTES		
2	1	3	0	0	0	0
OBL	FACW	FAC	*OTHER	FAC-	FACU	UPL

Hydrophytes Subtotal (A): 6

Non-hydrophytes Subtotal (B): 0

Percent Hydrophytes (100A/A+B): 6/6 = 100%

HYDROLOGY

☐ RECORDED DATA

Stream, lake or tidal gage Identifications:
Aerial photography Identifications:
Other Identifications:

☑ NO RECORDED DATA

☑ OBSERVATIONS:

Depth to Free Water: 1 inch
Depth to Saturation (including capillary fringe): 0 inches, saturated at surface
Altered Hydrology (explain): None Observed

☐ Inundated ☑ Saturated within Upper 12" ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns

☐ OTHER (explain):

Project Title: Calais LNG | **MP:** 2.1 | **Transect:** W-19 | **Plot:** Wetland

SOIL Sketch landscape position of this plot. Indicate relative position of other plot(s) and the wetland flag if not on plan.

Wetland Plot Center ←30 feet → Wetland Boundary ←14 feet → Upland Plot Center

Submission of photo of plot is encouraged.

DEPTH	HORIZON	MATRIX COLOR	REDOXIMORPHIC FEATURES (color, abundance, size, contrast)	COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root distribution, soil water, etc)
0 – 29	O	[10YR 2/2]	----------	Organic muck; slightly to mostly decomposed leaves; twigs and bark; saturated
29+	Bedrock	----------	----------	Rock refusal

HYDRIC SOIL INDICATOR(S): III - Histosol

REFERENCE(S):
New England Hydric Soils Technical Committee. 2004. 3rd ed., *Field Indicators for Identifying Hydric Soils in New England.* New England Interstate Water Pollution Control Commission, Lowell, MA.

OPTIONAL SOIL DATA:

REFERENCE(S):

Taxonomic subgroup:

Soil drainage class: Very poorly drained

CONCLUSIONS

	YES	NO	REMARKS:
Hydrophytic vegetation met?	☑	☐	
Hydric soils criterion met?	☑	☐	
Wetland hydrology met?	☑	☐	
Is this data point in a wetland?	☑	☐	

PROJECT TITLE: Calais LNG **MP:** 2.1 **TRANSECT**: W-19 **PLOT**: Upland

EVALUATOR(S): W.S.M. **DATE:** April 30, 2009

VEGETATION Stratum	Species	Dominance Ratio	Percent Dominance	DOM	NWI Status
Herbs/Seedlings	None				
Mosses	Scattered				
Shrubs	*Abies balsamea* (balsam fir)	38/59	64	X	FAC
	Thuja occidentalis (northern white cedar)	10.5/59	18		---
	Picea rubens (red spruce)	10.5/59	18		---

Sapling	*Abies balsamea* (balsam fir)	85.5/106.5	80	X	FAC
	Thuja occidentalis (northern white cedar)	10.5/106.5	10		---
	Betula papyrifera (paper birch)	10.5/106.5	10		---
Trees	*Acer rubrum* (red maple)	369/506	73	X	FAC
	Abies balsamea (balsam fir)	77/506	15		---
	Picea rubens (red spruce)	59/506	12		---

HYDROPHYTES				NON-HYDROPHYTES		
0	0	3	0	0	0	0
OBL	FACW	FAC	*OTHER	FAC-	FACU	UPL

Hydrophytes Subtotal (A): 3

Non-hydrophytes Subtotal (B): 0

Percent Hydrophytes (100A/A+B): 3/3 = 100%

HYDROLOGY

☐ RECORDED DATA

Stream, lake or tidal gage Identifications:
Aerial photography Identifications:
Other Identifications:

☑ NO RECORDED DATA

☑ OBSERVATIONS:

Depth to Free Water: > 14 inches; none observed
Depth to Saturation (including capillary fringe): > 14 inches
Altered Hydrology (explain): None Observed

☐ Inundated ☐ Saturated within Upper 12" ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns

☐ OTHER (explain):

Project Title: Calais LNG | **MP:** 2.1 | **Transect:** W-19 | **Plot:** Upland

SOIL Sketch landscape position of this plot. Indicate relative position of other plot(s) and the wetland flag if not on plan.

Wetland Plot Center ←30 feet → Wetland Boundary ←14 feet → Upland Plot Center

Submission of photo of plot is encouraged.

DEPTH	HORIZON	MATRIX COLOR	REDOXIMORPHIC FEATURES (color, abundance, size, contrast)	COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root distribution, soil water, etc)
1 – 0	Oi	----------	----------	Fibric; needles, leaved, twigs
0 – 4	A	10YR 2/1	None	Loam; moist; common fine roots; friable
4 – 6	E	10YR 6/1	None	Loamy sand; common fine roots; moist
6 – 14	Bs	7.5YR 4/6	None	Loamy coarse sand; few roots
>14	Bedrock	----------	----------	Rock refusal

HYDRIC SOIL INDICATOR(S): Non-hydric

REFERENCE(S):
New England Hydric Soils Technical Committee. 2004. 3rd ed., *Field Indicators for Identifying Hydric Soils in New England.* New England Interstate Water Pollution Control Commission, Lowell, MA.

OPTIONAL SOIL DATA:

REFERENCE(S):

Taxonomic subgroup:

Soil drainage class:

CONCLUSIONS

	YES	NO	REMARKS:
Hydrophytic vegetation met?	☑	☐	
Hydric soils criterion met?	☐	☑	
Wetland hydrology met?	☐	☑	
Is this data point in a wetland?	☐	☑	

PROJECT TITLE: Calais LNG **MP:** 3.35 **TRANSECT**: W-24C **PLOT**: Wetland

EVALUATOR(S): W.S.M. **DATE:** May 4, 2009

VEGETATION Stratum	Species	Dominance Ratio	Percent Dominance	DOM	NWI Status
Mosses	*Sphagnum sp.* (Sphagnum moss)	38/76	50	X	OBL
	Polytrichum sp. (Polytrichum moss)	38/76	50	X	NI
Herbs/Seedlings	*Picea rubens* (red spruce)*	20.5/55	37	X	FACU*
	Carex trisperma (three-seeded sedge)	10.5/55	19	X	OBL
	Vaccinium oxycoccos (small cranberry)	10.5/55	19	X	OBL
	Abies balsamea (balsam fir)	10.5/55	19	X	FAC
	Kalmia angustifolia (sheeplaurel)	3/55	5		---
Shrubs	*Ilex verticillata* (common winterberry)	38/48.5	78	X	FACW
	Ledum groenlandicum (bog Labrador tea)	10.5/48.5	22	X	OBL
Saplings	*Abies balsamea* (balsam fir)	10.5/42	25	X	FAC
	Picea rubens (red spruce)*	10.5/42	25	X	FACU*
	Acer rubrum (red maple)	10.5/42	25	X	FAC
	Thuja occidentalis (northern white cedar)	10.5/42	25	X	FACW

*exhibited raised roots due to wetness

HYDROPHYTES				NON-HYDROPHYTES		
4	2	3	2	0	0	0
OBL	FACW	FAC	*OTHER	FAC-	FACU	UPL

Hydrophytes Subtotal (A): 11 Non-hydrophytes Subtotal (B): 0

Percent Hydrophytes (100A/A+B): 11/11 = 100%

HYDROLOGY

☐ RECORDED DATA

Stream, lake or tidal gage Identifications:
Aerial photography Identifications:
Other Identifications:

☑ NO RECORDED DATA

☑ OBSERVATIONS:

Depth to Free Water: 0 inches; ponded 1 inch at pit location
Depth to Saturation (including capillary fringe): 0 inches, saturated at surface; 46.0 degrees F
Altered Hydrology (explain): None Observed

☑ Inundated ☑ Saturated within Upper 12" ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns

☐ OTHER (explain):

Project Title: Calais LNG | **MP:** 3.35 | **Transect:** W-24C | **Plot:** Wetland

SOIL Sketch landscape position of this plot. Indicate relative position of other plot(s) and the wetland flag if not on plan.

Wetland Plot Center ←36 feet → Wetland Boundary ←30 feet → Upland Plot Center

Submission of photo of plot is encouraged.

DEPTH	HORIZON	MATRIX COLOR	REDOXIMORPHIC FEATURES (color, abundance, size, contrast)	COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root distribution, soil water, etc)
0 – 10	O	--------	--------	Muck and peat; decomposed Sphagnum moss; saturated
10 – 18	B1	2.5Y 5/2	10YR 4/4 common; medium; prominent	Loamy sand, some stickiness/clay; no roots; saturated
18 – 25+	B2	2.5Y 6/2	10YR 5/6 many, medium, prominent	Loamy sand; saturated; no roots

HYDRIC SOIL INDICATOR(S): IV – Histic epipidon

REFERENCE(S):
New England Hydric Soils Technical Committee. 2004. 3rd ed., *Field Indicators for Identifying Hydric Soils in New England.* New England Interstate Water Pollution Control Commission, Lowell, MA.

OPTIONAL SOIL DATA:

Taxonomic subgroup:

Soil drainage class:

REFERENCE(S):

CONCLUSIONS

	YES	NO	REMARKS:
Hydrophytic vegetation met?	☑	☐	
Hydric soils criterion met?	☑	☐	
Wetland hydrology met?	☑	☐	
Is this data point in a wetland?	☑	☐	

PROJECT TITLE: Calais LNG **MP:** 3.35 **TRANSECT**: W-24C **PLOT**: Upland

EVALUATOR(S): W.S.M. **DATE:** May 4, 2009

VEGETATION Stratum	Species	Dominance Ratio	Percent Dominance	DOM	NWI Status
Mosses	*Polytrichum sp.* (Polytricum moss)	38/38	100	X	NI
Herbs/Seedlings	*Maianthemum canadense* (Canada mayflower)	20.5/20.5	100	X	FAC-
Shrubs	*Abies balsamea* (balsam fir)	20.5/31	66	X	FAC
	Acer rubrum (red maple)	10.5/31	34	X	FAC
Saplings	*Thuja occidentalis* (northern white cedar)	20.5/41	50	X	FACW
	Abies balsamea (balsam fir)	20.5/41	50	X	FAC
Trees	*Thuja occidentalis* (northern white cedar)	733/1395	53	X	FACW
	Abies balsamea (balsam fir)	436/1395	31	X	FAC
	Acer rubrum (red maple)	115/1395	8		---
	Picea rubens (red spruce)	111/1395	8		---

HYDROPHYTES

0	2	4	0
OBL	FACW	FAC	*OTHER

NON-HYDROPHYTES

1	0	0
FAC-	FACU	UPL

Hydrophytes Subtotal (A): 6

Non-hydrophytes Subtotal (B): 1

Percent Hydrophytes (100A/A+B): 6/7 = 86%

HYDROLOGY

☐ RECORDED DATA

Stream, lake or tidal gage Identifications:
Aerial photography Identifications:
Other Identifications:

☑ NO RECORDED DATA

☑ OBSERVATIONS:

Depth to Free Water: > 23 inches
Depth to Saturation (including capillary fringe): 20 inches
Altered Hydrology (explain): None Observed

☐ Inundated ☐ Saturated within Upper 12" ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns

☐ OTHER (explain):

Project Title: Calais LNG | **MP:** 3.35 | **Transect:** W-24C | **Plot:** Upland

SOIL Sketch landscape position of this plot. Indicate relative position of other plot(s) and the wetland flag if not on plan.

Wetland Plot Center ←36 feet → Wetland Boundary ←30 feet → Upland Plot Center

Submission of photo of plot is encouraged.

DEPTH	HORIZON	MATRIX COLOR	REDOXIMORPHIC FEATURES (color, abundance, size, contrast)	COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root distribution, soil water, etc)
0 – 4	A	10YR 3/2	None	Sandy loam; many fine roots; few medium roots; moist
4 – 15	B1	10YR 4/4	None	Coarse loamy sand; moist; few medium roots
15 – 23+	B2	2.5Y 5/4	None	Coarse loamy sand; few medium roots; very moist – saturated at 20 inches

HYDRIC SOIL INDICATOR(S): Non-hydric

REFERENCE(S):
New England Hydric Soils Technical Committee. 2004. 3rd ed., *Field Indicators for Identifying Hydric Soils in New England.* New England Interstate Water Pollution Control Commission, Lowell, MA.

OPTIONAL SOIL DATA:

REFERENCE(S):

Taxonomic subgroup:

Soil drainage class:

CONCLUSIONS

	YES	NO	REMARKS:
Hydrophytic vegetation met?	☑	☐	
Hydric soils criterion met?	☐	☑	
Wetland hydrology met?	☐	☑	
Is this data point in a wetland?	☐	☑	

PROJECT TITLE: Calais LNG **MP:** 8.6 **TRANSECT**: W-209 **PLOT**: Wetland

EVALUATOR(S): W.S.M. **DATE:** May 4, 2009

VEGETATION Stratum	Species	Dominance Ratio	Percent Dominance	DOM	NWI Status
Herbs/Seedlings	*Rubus hispidus* (bristly dewberry)	10.5/24	44	X	FACW
	Dryopteris intermedia (intermediate woodfern)	10.5/24	44	X	FACU
	Saxifraga pensylvanica (Swamp Saxifrage)	3/24	12		
Shrubs	*Alnus incana* (speckled alder)	63/94	67	X	FACW
	Prunus virginiana (choke cherry)	20.5/94	22	X	FACU
	Lonicera Canadensis (american fly honeysuckle)	10.5/94	11		
Sapling	*Acer rubrum* (red maple)	38/59	64	X	FAC
	Fraxinus pennsylvanica (green ash)	10.5/59	18		
	Picea rubens (red spruce)	10.5/59	18		
Trees	*Picea rubens* (red spruce)*	747/856	56	X	FACU*
	Larix laricina (tamarack)	25/856	30	X	FACW
	Acer rubrum (red maple)	85/856	14		

*raised root morphology due to wetness

HYDROPHYTES				NON-HYDROPHYTES		
0	3	1	1	0	2	0
OBL	FACW	FAC	*OTHER	FAC-	FACU	UPL

Hydrophytes Subtotal (A): 5

Non-hydrophytes Subtotal (B): 2

Percent Hydrophytes (100A/A+B): 5/7 = 71%

HYDROLOGY

☐ RECORDED DATA

Stream, lake or tidal gage Identifications:
Aerial photography Identifications:
Other Identifications:

☑ NO RECORDED DATA

☑ OBSERVATIONS:

Depth to Free Water: 12 inches
Depth to Saturation (including capillary fringe): 0 inches, saturated at surface
Altered Hydrology (explain): None Observed

☐ Inundated ☑ Saturated within Upper 12" ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns

☑ OTHER (explain): Water-stained leaves

Project Title: Calais LNG | **MP:** 8.6 | **Transect:** W-209 | **Plot:** Wetland

SOIL Sketch landscape position of this plot. Indicate relative position of other plot(s) and the wetland flag if not on plan.

Wetland Plot Center ←36 feet → Wetland Boundary ←30 feet → Upland Plot Center

Submission of photo of plot is encouraged.

DEPTH	HORIZON	MATRIX COLOR	REDOXIMORPHIC FEATURES (color, abundance, size, contrast)	COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root distribution, soil water, etc)
0 – 5	A	10YR 4/2	None	Loam; saturated; many fine roots
5 – 12	B1	2.5Y 5/2	7.5YR 3/4, common, medium, prominent	Loam; saturated; few fine roots
12 – 24+	B2	5Y 5/2	10YR 4/4; many, medium, prominent	Sandy loam; saturated; no roots

HYDRIC SOIL INDICATOR(S): VI – Depleted or Gleyed Matrix

REFERENCE(S):
New England Hydric Soils Technical Committee. 2004. 3rd ed., *Field Indicators for Identifying Hydric Soils in New England.* New England Interstate Water Pollution Control Commission, Lowell, MA.

OPTIONAL SOIL DATA:

Taxonomic subgroup:

Soil drainage class:

REFERENCE(S):

CONCLUSIONS

	YES	NO	REMARKS:
Hydrophytic vegetation met?	☑	☐	
Hydric soils criterion met?	☑	☐	
Wetland hydrology met?	☑	☐	
Is this data point in a wetland?	☑	☐	

PROJECT TITLE: Calais LNG **MP:** 8.6 **TRANSECT**: W-209 **PLOT**: Upland

EVALUATOR(S): W.S.M. **DATE:** May 4, 2009

VEGETATION Stratum	Species	Dominance Ratio	Percent Dominance	DOM	NWI Status
Mosses	*Polytrichum sp.* (Polytrichum moss)	38/38	100	X	NI
Herbs/Seedlings	*Dryopteris intermedia* (intermediate woodfern)	10.5/13.5	78	X	FACU
	Hieracium pretense (yellow hawkweed)	3/13.5	22	X	NI
Shrubs	*Prunus virginiana* (choke cherry)	20.5/44	47	X	FACU
	Pinus strobus (eastern white pine)	20.5/44	47	X	FACU
	Abies balsamea (balsam fir)	3/44	6		---
Saplings	*Picea rubens* (red spruce)	3/3	100	X	FACU
Trees	*Pinus strobus* (eastern white pine)	1157/1549	75	X	FACU
	Picea rubens (red spruce)	231/1549	15		---
	Larix laricina (tamarack)	161/1549	10		---

HYDROPHYTES

0	0	0	0
OBL	FACW	FAC	*OTHER

NON-HYDROPHYTES

0	5	0
FAC-	FACU	UPL

Hydrophytes Subtotal (A): 0

Non-hydrophytes Subtotal (B): 1

Percent Hydrophytes (100A/A+B): 0/5 = 0%

HYDROLOGY

☐ RECORDED DATA

Stream, lake or tidal gage Identifications:
Aerial photography Identifications:
Other Identifications:

☑ NO RECORDED DATA

☑ OBSERVATIONS:

Depth to Free Water: > 23 inches; none observed
Depth to Saturation (including capillary fringe): 16 inches
Altered Hydrology (explain): None Observed

☐ Inundated ☐ Saturated within Upper 12" ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns

☐ OTHER (explain):

Project Title: Calais LNG | **MP:** 8.6 | **Transect:** W-209 | **Plot:** Upland

SOIL Sketch landscape position of this plot. Indicate relative position of other plot(s) and the wetland flag if not on plan.

Wetland Plot Center ←20 feet → Wetland Boundary ←35 feet → Upland Plot Center

Submission of photo of plot is encouraged.

DEPTH	HORIZON	MATRIX COLOR	REDOXIMORPHIC FEATURES (color, abundance, size, contrast)	COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root distribution, soil water, etc)
0 – 2	A	10YR 2/2	None	Sandy loam; dry; few needles mixed in
2 – 14	B	2.5Y 5/3	10YR 4/6 beginning at 8 inches; common, medium, prominent	Loam, few fine roots; moist
14 – 23+	C	5Y 6/2	2.5Y 6/4 common, medium, distinct	Sandy loam; few notes

HYDRIC SOIL INDICATOR(S): Non-hydric

REFERENCE(S):
New England Hydric Soils Technical Committee. 2004. 3rd ed., *Field Indicators for Identifying Hydric Soils in New England*. New England Interstate Water Pollution Control Commission, Lowell, MA.

OPTIONAL SOIL DATA:

REFERENCE(S):

Taxonomic subgroup:

Soil drainage class:

CONCLUSIONS

	YES	NO	REMARKS:
Hydrophytic vegetation met?	☐	☑	
Hydric soils criterion met?	☐	☑	
Wetland hydrology met?	☐	☑	
Is this data point in a wetland?	☐	☑	

PROJECT TITLE: Calais LNG **MP:** 9.6 **TRANSECT**: W-89C **PLOT**: Wetland

EVALUATOR(S): W.S.M. **DATE:** May 4, 2009

VEGETATION Stratum	Species	Dominance Ratio	Percent Dominance	DOM	NWI Status
Herbs/Seedlings	*Carex lacustris* (hairy sedge)	85.5/106	81	X	OBL
	Onoclea sensibilis (sensitive fern)	20.5/106	19		---
Shrubs	*Alnus rugosa* (speckled alder)	38/96.5	39	X	FACW
	Spiraea alba (white meadowsweet)	38/96.5	39	X	FACW
	Salix discolor (pussy willow)	20.5/96.5	21	X	FACW
Sapling	*Acer rubrum* (red maple)	3/6	50	X	FAC
	Fraxinus pennsylvanica (green ash)	3/6	50	X	FACW
Trees	*Fraxinus pennsylvanica* (green ash)	152/176	86	X	FACW
	Acer rubrum (red maple)	24/176	14		---

HYDROPHYTES

1	5	1	0
OBL	FACW	FAC	*OTHER

NON-HYDROPHYTES

0	0	0
FAC-	FACU	UPL

Hydrophytes Subtotal (A): 7

Non-hydrophytes Subtotal (B): 0

Percent Hydrophytes (100A/A+B): 7/7 = 100%

HYDROLOGY

☐ RECORDED DATA

Stream, lake or tidal gage Identifications:
Aerial photography Identifications:
Other Identifications:

☑ NO RECORDED DATA

☑ OBSERVATIONS:

Depth to Free Water: 0 inches
Depth to Saturation (including capillary fringe): 0 inches, saturated at surface
Altered Hydrology (explain): None Observed

☐ Inundated ☑ Saturated within Upper 12" ☑ Water Marks ☐ Drift Lines ☑ Sediment Deposits ☐ Drainage Patterns

☑ OTHER (explain): Sulfidic-odor near surface

Project Title: Calais LNG | **MP:** 9.6 | **Transect:** W-89C | **Plot:** Wetland

SOIL Sketch landscape position of this plot. Indicate relative position of other plot(s) and the wetland flag if not on plan.

Wetland Plot Center ←25 feet → Wetland Boundary ←30 feet → Upland Plot Center

Submission of photo of plot is encouraged.

DEPTH	HORIZON	MATRIX COLOR	REDOXIMORPHIC FEATURES (color, abundance, size, contrast)	COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root distribution, soil water, etc)
0 – 9	O	--------	--------	Muck; partially decomposed sedges and other herbaceous plant material; saturated; sulfidic odor
9 – 20	B1	5Y 6/2	10YR 4/4, common, medium, prominent	Silty clay loam; saturated; organic material layers mixed in throughout horizon – partially decomposed leaves, consistent with floodplain area
20 – 30+	B2	N 6/1	None	Clay; no roots

HYDRIC SOIL INDICATOR(S): IV – Histic epipidon

REFERENCE(S):
New England Hydric Soils Technical Committee. 2004. 3rd ed., *Field Indicators for Identifying Hydric Soils in New England*. New England Interstate Water Pollution Control Commission, Lowell, MA.

OPTIONAL SOIL DATA:

Taxonomic subgroup:

Soil drainage class:

REFERENCE(S):

CONCLUSIONS

	YES	NO
Hydrophytic vegetation met?	☑	☐
Hydric soils criterion met?	☑	☐
Wetland hydrology met?	☑	☐
Is this data point in a wetland?	☑	☐

REMARKS:

PROJECT TITLE: Calais LNG **MP:** 9.6 **TRANSECT**: W-89C **PLOT**: Upland

EVALUATOR(S): W.S.M. **DATE:** May 4, 2009

VEGETATION Stratum	Species	Dominance Ratio	Percent Dominance	DOM	NWI Status
Herbs/Seedlings	*Maianthemum canadense* (Canada mayflower)	10.5/19.5	54	X	FAC-
	Taraxacum officinale (common dandelion)	3/19.5	15		---
	Hieracium sp. (hawkweed)	3/19.5	15		---
	Viola sororia (common blue violet)	3/19.5	15		---
Shrubs	*Pinus strobes* (eastern white pine)	3/9	33	X	FACU
	Spiraea alba (white meadowsweet)	3/9	33	X	FACW
	Fraxinus pennsylvanica (green ash)	3/9	33	X	FACW
Sapling	*Acer rubrum* (red maple)	20.5/41.5	49	X	FAC
	Fraxinus pennsylvanica (green ash)	10.5/41.5	25	X	FACW
	Pinus strobes (eastern white pine)	10.5/41.5	25	X	FACU
Trees	*Acer rubrum* (red maple)	881/1230	49	X	FAC
	Betula populifolia (gray birch)	186/1230	17		---
	Fraxinus pennsylvanica (green ash)	96/1230	8		---
	Thuja occidentalis (northern white cedar)	67/1230	5		---

HYDROPHYTES				NON-HYDROPHYTES		
0	3	2	0	1	2	0
OBL	FACW	FAC	*OTHER	FAC-	FACU	UPL

Hydrophytes Subtotal (A): 5

Non-hydrophytes Subtotal (B): 3

Percent Hydrophytes (100A/A+B): 5/8 = 63%

HYDROLOGY

☐ RECORDED DATA

Stream, lake or tidal gage Identifications:
Aerial photography Identifications:
Other Identifications:

☑ NO RECORDED DATA

☑ OBSERVATIONS:

Depth to Free Water: > 11 inches
Depth to Saturation (including capillary fringe): > 11 inches – rock refusal; extremely rocky condtions
Altered Hydrology (explain): None Observed

☐ Inundated ☐ Saturated within Upper 12" ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns

☐ OTHER (explain):

Project Title: Calais LNG | **MP:** 9.6 | **Transect:** W-89C | **Plot:** Upland

SOIL Sketch landscape position of this plot. Indicate relative position of other plot(s) and the wetland flag if not on plan.

Wetland Plot Center ←25 feet → Wetland Boundary ←30 feet → Upland Plot Center

Submission of photo of plot is encouraged.

DEPTH	HORIZON	MATRIX COLOR	REDOXIMORPHIC FEATURES (color, abundance, size, contrast)	COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root distribution, soil water, etc)
0 – 6	A	2.5Y 3/2	None	Loam; moist; many fine roots; very to extremely rocky
6 – 11	B	5Y 4/4	None	Sandy loam; very moist; many fine roots; very to extremely rocky
> 11	Rocks/Boulders			Rock refusal

HYDRIC SOIL INDICATOR(S): Non- hydric

REFERENCE(S):
New England Hydric Soils Technical Committee. 2004. 3rd ed., *Field Indicators for Identifying Hydric Soils in New England.* New England Interstate Water Pollution Control Commission, Lowell, MA.

OPTIONAL SOIL DATA:

REFERENCE(S):

Taxonomic subgroup:

Soil drainage class:

CONCLUSIONS

	YES	NO
Hydrophytic vegetation met?	☑	☐
Hydric soils criterion met?	☐	☑
Wetland hydrology met?	☐	☑
Is this data point in a wetland?	☐	☑

REMARKS:

PROJECT TITLE: Calais LNG **MP:** 12.2 **TRANSECT**: W-118A **PLOT**: Wetland

EVALUATOR(S): W.S.M. **DATE:** May 4, 2009

VEGETATION Stratum	Species	Dominance Ratio	Percent Dominance	DOM	NWI Status
Herbs/Seedlings	*Rubus Hispidus* (bristly dewberry)	10.5/99	78	X	FACW
	Saxifraga pensylvanica (Swamp Saxifrage)	3/99	22	X	OBL
Moss	*Sphagnum sp.* (sphagnum moss)	85.5/85.5	100	X	OBL
Shrubs	*Alnus incana* (speckled alder)	85.5/96	89	X	FACW
	Abies balsamea (balsam fir)	10.5/96	11		
Sapling	*Abies balsamea* (balsam fir)	10.5/13.5	78	X	FAC
	Acer rubrum (red maple)	3/13.5	22	X	FAC
Trees	*Abies balsamea* (balsam fir)	101/179	56	X	FAC
	Populus tremuloides (quaking aspen)	53/179	30	X	FACU
	Acer rubrum (red maple)	25/179	14		

HYDROPHYTES				NON-HYDROPHYTES		
2	2	3	0	0	1	0
OBL	FACW	FAC	*OTHER	FAC-	FACU	UPL

Hydrophytes Subtotal (A): 7

Non-hydrophytes Subtotal (B): 1

Percent Hydrophytes (100A/A+B): 7/8 = 88%

HYDROLOGY

☐ RECORDED DATA

Stream, lake or tidal gage Identifications:
Aerial photography Identifications:
Other Identifications:

☑ NO RECORDED DATA

☑ OBSERVATIONS:

Depth to Free Water: 4 inches
Depth to Saturation (including capillary fringe): 0 inches, saturated at surface
Altered Hydrology (explain): None Observed

☐ Inundated ☑ Saturated within Upper 12" ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns

☑ OTHER (explain): water stained leaves; sulfidic odor

Project Title: Calais LNG | **MP:** 12.2 | **Transect:** W-118A | **Plot:** Wetland

SOIL Sketch landscape position of this plot. Indicate relative position of other plot(s) and the wetland flag if not on plan.

Wetland Plot Center ←21 feet → Wetland Boundary ←35 feet → Upland Plot Center

Submission of photo of plot is encouraged.

DEPTH	HORIZON	MATRIX COLOR	REDOXIMORPHIC FEATURES (color, abundance, size, contrast)	COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root distribution, soil water, etc)
0 – 9	O	--------	--------	Muck and Sphagnum peat; greasy; low bulk density; decomposed leaves; saturated
9 – 13	A	5Y 4/1	None	Clay loam; saturated; no roots
13 – 25+	Bg	10Y 6/1	10YR 5/6; many, medium, prominent	Clay; no roots; saturated

HYDRIC SOIL INDICATOR(S): VI – Histic epipidon

REFERENCE(S):
New England Hydric Soils Technical Committee. 2004. 3rd ed., *Field Indicators for Identifying Hydric Soils in New England.* New England Interstate Water Pollution Control Commission, Lowell, MA.

OPTIONAL SOIL DATA:

REFERENCE(S):

Taxonomic subgroup:

Soil drainage class:

CONCLUSIONS

	YES	NO	REMARKS:
Hydrophytic vegetation met?	☑	☐	
Hydric soils criterion met?	☑	☐	
Wetland hydrology met?	☑	☐	
Is this data point in a wetland?	☑	☐	

PROJECT TITLE: Calais LNG **MP:** 12.2 **TRANSECT**: W-118A **PLOT**: Upland

EVALUATOR(S): W.S.M. **DATE:** May 4, 2009

VEGETATION

Stratum	Species	Dominance Ratio	Percent Dominance	DOM	NWI Status
Herbs/Seedlings	None				
Shrubs	None				
Sapling	*Abies balsamea* (balsam fir)	63/66	95	X	FAC
	Betula populifolia (gray birch)	3/66	5		
Trees	*Abies balsamea* (balsam fir)	538/899	60	X	FAC
	Populus tremuloides (quaking aspen)	230/899	26	X	FACU
	Thuja occidentalis (northern white cedar)	131/899	15		

HYDROPHYTES

OBL	FACW	FAC	*OTHER
		2	0

NON-HYDROPHYTES

FAC-	FACU	UPL
0	1	0

Hydrophytes Subtotal (A): 2

Non-hydrophytes Subtotal (B): 1

Percent Hydrophytes (100A/A+B): 2/3 = 67%

HYDROLOGY

☐ RECORDED DATA

Stream, lake or tidal gage Identifications:
Aerial photography Identifications:
Other Identifications:

☑ NO RECORDED DATA

☑ OBSERVATIONS:

Depth to Free Water: > 20 inches
Depth to Saturation (including capillary fringe): 15 inches
Altered Hydrology (explain): None Observed

☐ Inundated ☐ Saturated within Upper 12" ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns

☐ OTHER (explain):

Project Title: Calais LNG | **MP:** 12.2 | **Transect:** W-118A | **Plot:** Wetland

SOIL Sketch landscape position of this plot. Indicate relative position of other plot(s) and the wetland flag if not on plan.

Wetland Plot Center ←21 feet → Wetland Boundary ←35 feet → Upland Plot Center

Submission of photo of plot is encouraged.

DEPTH	HORIZON	MATRIX COLOR	REDOXIMORPHIC FEATURES (color, abundance, size, contrast)	COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root distribution, soil water, etc)
0 – 3	A	10YR 2/1	None	Loam; many fine roots
3 – 9	B1	10YR 4/4	None	Sandy loam; common medium roots; moist; very stony
9 – 20+	B2	5Y 6/3	10YR 4/4; many, medium, large	Coarse sandy loam; few medium roots; very stony

HYDRIC SOIL INDICATOR(S): Non-hydric

REFERENCE(S):
New England Hydric Soils Technical Committee. 2004. 3rd ed., *Field Indicators for Identifying Hydric Soils in New England.* New England Interstate Water Pollution Control Commission, Lowell, MA.

OPTIONAL SOIL DATA:

REFERENCE(S):

Taxonomic subgroup:

Soil drainage class:

CONCLUSIONS

	YES	NO
Hydrophytic vegetation met?	☑	☐
Hydric soils criterion met?	☐	☑
Wetland hydrology met?	☐	☑
Is this data point in a wetland?	☐	☑

REMARKS:

PROJECT TITLE: Calais LNG **MP:** 13.15 **TRANSECT**: W-125 **PLOT**: Wetland

EVALUATOR(S): W.S.M. **DATE:** May 5, 2009

VEGETATION Stratum	Species	Dominance Ratio	Percent Dominance	DOM	NWI Status
Mosses	*Sphagnum sp.* (Sphagnum moss)	10.5/10.5	100	X	OBL
Herbs/Seedlings	*Osmunda cinnamomea* (cinnamon fern)	38/82	46	X	FACW
	Calamagrostis canadensi (bluejoint)	38/82	46	X	FACW
	Medeola virginiana (Indian cucumber)	3/82	4		---
	Saxifraga pensylvanica (eastern swamp saxifrage)	3/82	4		---
Shrubs	*Salix bebbiana* (Bebb's willow)	20.5/31	66	X	FACW
	Spiraea alba (white meadowsweet)	10.5/31	34	X	FACW
Sapling	*Betula populifolia* (gray birch)	20.5/41.5	50	X	FAC
	Acer rubrum (red maple)	10.5/41.5	25	X	FAC
	Abies balsamea (balsam fir)	10.5/41.5	25	X	FAC
Trees	*Acer rubrum* (red maple)	25/25	100	X	FAC

HYDROPHYTES				NON-HYDROPHYTES		
1	4	4	0	0	0	0
OBL	FACW	FAC	*OTHER	FAC-	FACU	UPL

Hydrophytes Subtotal (A): 9

Non-hydrophytes Subtotal (B): 0

Percent Hydrophytes (100A/A+B): 9/9 = 100%

HYDROLOGY

☐ RECORDED DATA

Stream, lake or tidal gage Identifications:
Aerial photography Identifications:
Other Identifications:

☑ NO RECORDED DATA

☑ OBSERVATIONS:

Depth to Free Water: 4 inches
Depth to Saturation (including capillary fringe): 0 inches, saturated at surface
Altered Hydrology (explain): None Observed

☐ Inundated ☑ Saturated within Upper 12" ☐ Water Marks ☐ Drift Lines ☑ Sediment Deposits ☐ Drainage Patterns

☐ OTHER (explain):

Project Title: Calais LNG | **MP:** 13.15 | **Transect:** W-125 | **Plot:** Wetland

SOIL Sketch landscape position of this plot. Indicate relative position of other plot(s) and the wetland flag if not on plan.

Wetland Plot Center ←20 feet → Wetland Boundary ←35 feet → Upland Plot Center

Submission of photo of plot is encouraged.

DEPTH	HORIZON	MATRIX COLOR	REDOXIMORPHIC FEATURES (color, abundance, size, contrast)	COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root distribution, soil water, etc)
0 – 9	A	10YR 3/2	None	Loam; many fine roots; rocky; saturated
9 – 20+	B	10YR 5/2	7.5YR 4/6; common, medium, prominent	Sandy loam; few roots; very rocky; saturated
>20	Rock			Rock refusal

HYDRIC SOIL INDICATOR(S): VI – Depleted or Gleyed Matrix

REFERENCE(S):
New England Hydric Soils Technical Committee. 2004. 3rd ed., *Field Indicators for Identifying Hydric Soils in New England.* New England Interstate Water Pollution Control Commission, Lowell, MA.

OPTIONAL SOIL DATA:

Taxonomic subgroup:

Soil drainage class:

REFERENCE(S):

CONCLUSIONS

	YES	NO	REMARKS:
Hydrophytic vegetation met?	☑	☐	
Hydric soils criterion met?	☑	☐	
Wetland hydrology met?	☑	☐	
Is this data point in a wetland?	☑	☐	

PROJECT TITLE: Calais LNG **MP:** 13.15 **TRANSECT**: W-125 **PLOT**: Upland

EVALUATOR(S): W.S.M. **DATE:** May 5, 2009

VEGETATION Stratum	Species	Dominance Ratio	Percent Dominance	DOM	NWI Status
Herbs/Seedlings	*Maianthemum canadense* (Canada mayflower)	10.5/21	50	X	FAC-
	Hieracium caespitosum (yellow hawkweed)	10.5/21	50	X	NI
Shrubs	*Tsuga canadensis* (eastern hemlock)	10.5/13.5	78	X	FACU
	Abies balsamea (balsam fir)	3/13.5	22	X	FAC
Saplings	*Betula populifolia* (gray birch)	38/69.5	55	X	FAC
	Acer rubrum (red maple)	10.5/69.5	15		---
	Abies balsamea (balsam fir)	10.5/69.5	15		---
	Tsuga canadensis (eastern hemlock)	10.5/69.5	15		---
Trees	*Abies balsamea* (balsam fir)	21/41	51	X	FAC
	Populus tremuloides (quaking aspen)	20/41	49	X	FACU

HYDROPHYTES

0	0	3	0
OBL	FACW	FAC	*OTHER

NON-HYDROPHYTES

1	2	0
FAC-	FACU	UPL

Hydrophytes Subtotal (A): 3

Non-hydrophytes Subtotal (B): 3

Percent Hydrophytes (100A/A+B): 3/6 = 50%

HYDROLOGY

☐ RECORDED DATA

Stream, lake or tidal gage Identifications:
Aerial photography Identifications:
Other Identifications:

☑ NO RECORDED DATA

☑ OBSERVATIONS:

Depth to Free Water: > 16 inches
Depth to Saturation (including capillary fringe): > 16 inches
Altered Hydrology (explain): None Observed

☐ Inundated ☐ Saturated within Upper 12" ☐ Water Marks ☐ Drift Lines ☑ Sediment Deposits ☐ Drainage Patterns

☐ OTHER (explain):

Project Title: Calais LNG | **MP:** 13.15 | **Transect:** W-125 | **Plot:** Upland

SOIL Sketch landscape position of this plot. Indicate relative position of other plot(s) and the wetland flag if not on plan.

Wetland Plot Center ←20 feet → Wetland Boundary ←35 feet → Upland Plot Center

Submission of photo of plot is encouraged.

DEPTH	HORIZON	MATRIX COLOR	REDOXIMORPHIC FEATURES (color, abundance, size, contrast)	COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root distribution, soil water, etc)
0 – 5	A	2.5Y 3/2	None	Loam; common medium roots, many fine roots; moist
5 – 16	B	10YR 5/6	None	Sandy loam; common fine medium roots; moist; stoney
>16	Rock			Rock refusal

HYDRIC SOIL INDICATOR(S): Non-hydric

REFERENCE(S):
New England Hydric Soils Technical Committee. 2004. 3rd ed., *Field Indicators for Identifying Hydric Soils in New England.* New England Interstate Water Pollution Control Commission, Lowell, MA.

OPTIONAL SOIL DATA:

REFERENCE(S):

Taxonomic subgroup:

Soil drainage class:

CONCLUSIONS

	YES	NO	REMARKS:
Hydrophytic vegetation met?	☐	☑	
Hydric soils criterion met?	☐	☑	
Wetland hydrology met?	☐	☑	
Is this data point in a wetland?	☐	☑	

PROJECT TITLE: Calais LNG **MP:** 17.6 **TRANSECT**: W-148B **PLOT**: Wetland

EVALUATOR(S): W.S.M. **DATE:** May 5, 2009

VEGETATION Stratum	Species	Dominance Ratio	Percent Dominance	DOM	NWI Status
Mosses	*Sphagnum sp.* (Sphagnum moss)	10.5/10.5	100	X	OBL
Herbs/Seedlings	*Typha latifolia* (common cattail)	63/100	63	X	OBL
	Onoclea sensibilis (sensitive fern)	20.5/100	21	X	FACW
	Carex rostrata (beaked sedge)	10.5/100	11		---
	Pontederia cordata (pickerelweed)	3/100	3		---
	Lemna minor (common duckweed)	3/100	3		---
Shrubs	*Alnus rugosa* (speckled alder)	38/90	42	X	FACW
	Lonicera villosa (mountain fly honeysuckle)	20.5/90	23	X	NI
	Viburnum nudum L. var. *cassinoides* (northern wild raisin)	10.5/90	12		---
	Larix laricina (tamarack)	10.5/90	12		---
	Ilex verticillata (winterberry)	10.5/90	12		---
	Acer rubrum (red maple)	3/90	3		---
Trees	*Picea rubens* (red spruce)*	10.5/10.5	100	X	FACU*

HYDROPHYTES				NON-HYDROPHYTES		
2	2	0	1	0	0	0
OBL	FACW	FAC	*OTHER	FAC-	FACU	UPL

Hydrophytes Subtotal (A): 5

Non-hydrophytes Subtotal (B): 0

Percent Hydrophytes (100A/A+B): 5/5 = 100%

HYDROLOGY

☐ RECORDED DATA

Stream, lake or tidal gage Identifications:
Aerial photography Identifications:
Other Identifications:

☑ NO RECORDED DATA

☑ OBSERVATIONS:

Depth to Free Water: 3 inches inundated
Depth to Saturation (including capillary fringe): 0 inches, saturated at surface
Altered Hydrology (explain): None Observed

☑ Inundated ☑ Saturated within Upper 12" ☐ Water Marks ☐ Drift Lines ☑ Sediment Deposits ☐ Drainage Patterns

☑ OTHER (explain): water stained leaves; sulfidic odor near surface

Project Title: Calais LNG | **MP:** 17.6 | **Transect:** W-148B | **Plot:** Wetland

SOIL Sketch landscape position of this plot. Indicate relative position of other plot(s) and the wetland flag if not on plan.

Wetland Plot Center ←27 feet → Wetland Boundary ←35 feet → Upland Plot Center

Submission of photo of plot is encouraged.

DEPTH	HORIZON	MATRIX COLOR	REDOXIMORPHIC FEATURES (color, abundance, size, contrast)	COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root distribution, soil water, etc)
0 – 12	O	----------	----------	Muck; decomposed Sphagnum moss, leaves, twigs and cattail leaves; sulfidic odor near surface
12 – 24+	B	2.5Y 4/1	10YR 5/6; common, medium, prominent	Clay; no roots; saturated

HYDRIC SOIL INDICATOR(S): IV – Histic epipidon

REFERENCE(S):
New England Hydric Soils Technical Committee. 2004. 3rd ed., *Field Indicators for Identifying Hydric Soils in New England.* New England Interstate Water Pollution Control Commission, Lowell, MA.

OPTIONAL SOIL DATA:

Taxonomic subgroup:

Soil drainage class:

REFERENCE(S):

CONCLUSIONS

	YES	NO	REMARKS:
Hydrophytic vegetation met?	☑	☐	
Hydric soils criterion met?	☑	☐	
Wetland hydrology met?	☑	☐	
Is this data point in a wetland?	☑	☐	

PROJECT TITLE: Calais LNG **MP:** 17.6 **TRANSECT**: W-148B **PLOT**: Upland

EVALUATOR(S): W.S.M. **DATE:** May 5, 2009

VEGETATION Stratum	Species	Dominance Ratio	Percent Dominance	DOM	NWI Status
Mosses	*Hylocomium splendens* (splendid feathermoss)	63/63	100	X	NI
Herbs/Seedlings	*Abies balsamea* (balsam fir)	20.5/50	41	X	FAC
	Picea rubens (red spruce)	20.5/50	41	X	FACU
	Kalmia angustifolia (sheeplaurel)	3/50	6		---
	Cornus canadensis (bunchberry)	3/50	6		---
	Maianthemum canadense (Canada mayflower)	3/50	6		---
Shrubs	*Abies balsamea* (balsam fir)	10.5/21	50	X	FAC
	Picea rubens (red spruce)	10.5/21	50	X	FACU
Saplings	*Abies balsamea* (balsam fir)	38/41	93	X	FAC
	Pinus strobus (eastern white pine)	3/41	7		
Trees	*Abies balsamea* (balsam fir)	220/402	55	X	FAC
	Picea rubens (red spruce)	181/402	45	X	FACU

HYDROPHYTES

0	0	4	0
OBL	FACW	FAC	*OTHER

NON-HYDROPHYTES

0	3	0
FAC-	FACU	UPL

Hydrophytes Subtotal (A): 4

Non-hydrophytes Subtotal (B): 3

Percent Hydrophytes (100A/A+B): 4/7 = 57%

HYDROLOGY

☐ RECORDED DATA

Stream, lake or tidal gage Identifications:
Aerial photography Identifications:
Other Identifications:

☑ NO RECORDED DATA

☑ OBSERVATIONS:

Depth to Free Water: > 20 inches
Depth to Saturation (including capillary fringe): > 20 inches
Altered Hydrology (explain): None Observed

☐ Inundated ☐ Saturated within Upper 12" ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns

☐ OTHER (explain):

Project Title: Calais LNG | **MP:** 17.6 | **Transect:** W-148B | **Plot:** Upland

SOIL Sketch landscape position of this plot. Indicate relative position of other plot(s) and the wetland flag if not on plan.

Wetland Plot Center ←27 feet → Wetland Boundary ←35 feet → Upland Plot Center

Submission of photo of plot is encouraged.

DEPTH	HORIZON	MATRIX COLOR	REDOXIMORPHIC FEATURES (color, abundance, size, contrast)	COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root distribution, soil water, etc)
0 – 2	A	10YR 2/1	None	Loam; mossy; common fine roots; few medium roots
2 – 4	B1	7.5YR 4/4	None	Sandy loam; few coarse roots; moist; friable
4 – 20+	B2	10YR 5/6	None	Sandy loam; common med roots; moist

HYDRIC SOIL INDICATOR(S): Non-hydric

REFERENCE(S):
New England Hydric Soils Technical Committee. 2004. 3rd ed., *Field Indicators for Identifying Hydric Soils in New England.* New England Interstate Water Pollution Control Commission, Lowell, MA.

OPTIONAL SOIL DATA:

REFERENCE(S):

Taxonomic subgroup:

Soil drainage class:

CONCLUSIONS

	YES	NO	REMARKS:
Hydrophytic vegetation met?	☑	☐	
Hydric soils criterion met?	☐	☑	
Wetland hydrology met?	☐	☑	
Is this data point in a wetland?	☐	☑	

PROJECT TITLE: Calais LNG **MP:** 19.45 **TRANSECT**: W-163C **PLOT**: Wetland

EVALUATOR(S): W.S.M. **DATE:** May 5, 2009

VEGETATION Stratum	Species	Dominance Ratio	Percent Dominance	DOM	NWI Status
Herbs/Seedlings	*Saxifraga pensylvanica* (eastern swamp saxifrage)	3/3	100	X	OBL
Shrubs	*Abies balsamea* (balsam fir)	3/3	100	X	FAC
Sapling	*Abies balsamea* (balsam fir)	38/62	61	X	FAC
	Betula populifolia (gray birch)	10.5/62	17		---
	Picea rubens (red spruce)	10.5/62	17		---
	Thuja occidentalis (northern white cedar)	3/62	5		---
Trees	*Abies balsamea* (balsam fir)	397/1146	35	X	FAC
	Thuja occidentalis (northern white cedar)	316/1146	28	X	FACW
	Betula papyrifera (paper birch)	168/1146	15		---
	Acer Rubrum (red maple)	91/1146	8		---
	Populus grandidentata (bigtooth aspen)	82/1146	7		---
	Betula populifolia (gray birch)	53/1146	5		---
	Picea rubens (red spruce)	41/1146	4		---

HYDROPHYTES				NON-HYDROPHYTES		
1	1	3	0	0	0	0
OBL	FACW	FAC	*OTHER	FAC-	FACU	UPL

Hydrophytes Subtotal (A): 5

Non-hydrophytes Subtotal (B): 0

Percent Hydrophytes (100A/A+B): 5/5 = 100%

HYDROLOGY

☐ RECORDED DATA

Stream, lake or tidal gage Identifications:
Aerial photography Identifications:
Other Identifications:

☑ NO RECORDED DATA

☑ OBSERVATIONS:

Depth to Free Water: 8 inches
Depth to Saturation (including capillary fringe): 0 inches, saturated at surface
Altered Hydrology (explain): None Observed

☐ Inundated ☑ Saturated within Upper 12" ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns

☑ OTHER (explain): water stained leaves

Project Title: Calais LNG | **MP:** 19.45 | **Transect:** W-163C | **Plot:** Wetland

SOIL Sketch landscape position of this plot. Indicate relative position of other plot(s) and the wetland flag if not on plan.

Wetland Plot Center ←21 feet → Wetland Boundary ←28 feet → Upland Plot Center

Submission of photo of plot is encouraged.

DEPTH	HORIZON	MATRIX COLOR	REDOXIMORPHIC FEATURES (color, abundance, size, contrast)	COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root distribution, soil water, etc)
0 – 9	A	2.5Y 3/1	None	Coarse sandy loam; few medium roots; saturated
9 – 21+	B	2.5Y 5/3	10YR 5/6, common, medium, prominent	Loamy coarse sand; few roots; saturated

HYDRIC SOIL INDICATOR(S): X. B. Sandy with Redox

REFERENCE(S):
New England Hydric Soils Technical Committee. 2004. 3rd ed., *Field Indicators for Identifying Hydric Soils in New England.* New England Interstate Water Pollution Control Commission, Lowell, MA.

OPTIONAL SOIL DATA:

REFERENCE(S):

Taxonomic subgroup:

Soil drainage class:

CONCLUSIONS

	YES	NO	REMARKS:
Hydrophytic vegetation met?	☑	☐	
Hydric soils criterion met?	☑	☐	
Wetland hydrology met?	☑	☐	
Is this data point in a wetland?	☑	☐	

PROJECT TITLE: Calais LNG **MP:** 19.45 **TRANSECT**: W-163C **PLOT**: Upland

EVALUATOR(S): W.S.M. **DATE:** May 5, 2009

VEGETATION Stratum	Species	Dominance Ratio	Percent Dominance	DOM	NWI Status
Herbs/Seedlings	None				
Shrubs	None				
Sapling	*Abies balsamea* (balsam fir)	85.5/96	89	X	FAC
	Fraxinus americana (white ash)	10.5/96	11		---
Trees	*Tsuga Canadensis (*eastern white hemlock)	290/965	30	X	FACU
	Populus grandidentata (bigtooth aspen)	270/965	28	X	FACU
	Abies balsamea (balsam fir)	241/965	25	X	FAC
	Betula papyrifera (paper birch)	165/965	17		---

HYDROPHYTES

0	0	2	0
OBL	FACW	FAC	*OTHER

NON-HYDROPHYTES

0	2	0
FAC-	FACU	UPL

Hydrophytes Subtotal (A): 2

Non-hydrophytes Subtotal (B): 2

Percent Hydrophytes (100A/A+B): 2/4 = 50%

HYDROLOGY

☐ RECORDED DATA

Stream, lake or tidal gage Identifications:
Aerial photography Identifications:
Other Identifications:

☑ NO RECORDED DATA

☑ OBSERVATIONS:

Depth to Free Water: > 20 inches
Depth to Saturation (including capillary fringe): 15 inches
Altered Hydrology (explain): None Observed

☐ Inundated ☐ Saturated within Upper 12" ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns

☐ OTHER (explain):

Project Title: Calais LNG | **MP:** 19.45 | **Transect:** W-163C | **Plot:** Upland

SOIL Sketch landscape position of this plot. Indicate relative position of other plot(s) and the wetland flag if not on plan.

Wetland Plot Center ←21 feet → Wetland Boundary ←28 feet → Upland Plot Center

Submission of photo of plot is encouraged.

DEPTH	HORIZON	MATRIX COLOR	REDOXIMORPHIC FEATURES (color, abundance, size, contrast)	COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root distribution, soil water, etc)
0 – 3	A	10YR 2/1	None	Loam; many fine roots; few medium roots; moist
3 – 4	E	10YR 6/2	None	Fine sandy loam; many fine roots; few pebbles
4 – 16	Bs	7.5YR 4/4	None	Fine sandy loam; common medium roots; few coarse roots; moist; no redoximorphic features; very stony
16 – 20+	C	2.5Y 5/3	2.5Y 4/3, faint; common, medium	Coarse sandy loam

HYDRIC SOIL INDICATOR(S): Non-hydric

REFERENCE(S):
New England Hydric Soils Technical Committee. 2004. 3rd ed., *Field Indicators for Identifying Hydric Soils in New England.* New England Interstate Water Pollution Control Commission, Lowell, MA.

OPTIONAL SOIL DATA:

REFERENCE(S):

Taxonomic subgroup:

Soil drainage class:

CONCLUSIONS

	YES	NO	REMARKS:
Hydrophytic vegetation met?	☐	☑	
Hydric soils criterion met?	☐	☑	
Wetland hydrology met?	☐	☑	
Is this data point in a wetland?	☐	☑	